

EXHIBIT 1

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3 THE VIDEOGRAPHER: We are now on
4 the record.

5 My name is Deshawn White. I'm a
6 videographer for Golkow a Veritext division.
7 Today's date is June 4, 2025 and the time is 9:19
8 AM.

9 This video is being held at 401
10 9th street Northwest Washington, DC in the matter of
11 Camp Lejeune Water Litigation versus United States
12 of America for the United States District Court for
13 the Eastern District of is it North Carolina?

14 MS. BAUGHMAN: Yes.

15 THE VIDEOGRAPHER: Thank you.

16 The deponent is Remy John Claude
17 Hennet.

18 The court reporter is Denise
19 Vickery.

20 Will counsel please identify
21 themselves followed by the court reporter
22 administering the oath.

23 MS. BAUGHMAN: Laura Baughman for
24 the plaintiffs.

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2 MS. O'LEARY: Allison O'Leary for
3 the Department of Justice.

4 MS. HORAN: Alanna Horan here on
5 behalf of the United States.

6 - - -

7 REMY J.-C. HENNET, PhD
8 called for examination, and, after having been duly
9 sworn, was examined and testified as follows:

10 - - -

11 EXAMINATION

12 - - -

13 BY MS. BAUGHMAN:

14 Q. Can you please state your name for the
15 record?

16 A. My name is Remy Jean-Claude Hennet.

17 Q. Dr. Hennet, my name is Laura Baughman
18 I'm an attorney and I represent the plaintiffs in
19 the Camp Lejeune litigation.

20 You understand that?

21 A. Yes, I do.

22 Q. Okay. And you understand that you're
23 here today testifying under oath just as if you
24 you're in court in front of the judges?

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2 A. Yes, I do.

3 Q. Okay. If you don't understand any
4 question I ask you will you please let me know?

5 A. I will.

6 Q. Otherwise if you answer a question I'm
7 going to assume that you understood it.

8 Is that fair?

9 A. I suppose, yes.

10 Q. Okay. Is there any reason you cannot
11 testify truthfully here today like are you on any
12 medications or having any any health or other
13 issues?

14 A. No.

15 Q. Okay. Great.

16 I want to start with your history and
17 working on Camp Lejeune related matters.

18 So is it correct that you first started
19 working on anything related to Camp Lejeune in 2005?

20 A. Approximately yes.

21 Q. Okay. And just for context I'm going to
22 mark an e-mail that was sent to us by one of the
23 attorneys at the Department of Justice. I just have
24 a quick question about that. Okay?

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2 (Document marked for
3 identification as Exhibit 30.)

4 BY MS. BAUGHMAN:

5 Q. So this is an e-mail from Joshua
6 Carpentito -- I may -- Carpenito I guess -- from May
7 1, 2025 sent to me and other counsel representing
8 the plaintiffs and he is indicated that United
9 States has confirmed through internal documentation
10 that Dr. Remy Hennet was retained by the Department
11 of Justice as of February 25, 2005 and Gross that's
12 G-r-o-s-s versus United States and it goes on from
13 there and that was an action under the federal tort
14 claims act claiming personal injury as a result of
15 exposure to contaminated water at Camp Lejeune.

16 MS. O'LEARY: And I'm sorry to
17 interrupt what is the exhibit number for this it
18 might be marked on there but I didn't hear it.

19 MS. BAUGHMAN: It's Exhibit 30.

20 MS. O'LEARY: 30 thank you.

21 MS. BAUGHMAN: Okay.

22 BY MS. BAUGHMAN:

23 Q. So Dr. Hennet does that -- is that
24 correct? Is that consistent with your recollection

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2 that you were retained on February 25, 2005 in the
3 Gross case?

4 MS. O'LEARY: Object to
5 foundation.

6 THE WITNESS: I don't recall the
7 details of it but I was retained by the DOJ in 2005.
8 That's what I recall.

9 BY MS. BAUGHMAN:

10 Q. To work on personal injury a personal
11 injury case related to Camp Lejeune?

12 A. Yes. I was retained as -- as an expert.

13 Q. Yes.

14 A. As to basically do some work on the
15 contamination in the water supply.

16 Q. Okay. Do you know how many different
17 litigation cases you've been retained on by the
18 Department of Justice related to Camp Lejeune?

19 A. There was more than one but I don't know
20 exactly.

21 Q. Okay. Other -- before we started the
22 deposition I handed you a copy of the deposition
23 that was taken of you on March 20, 2005 in the Camp
24 Lejeune Water Litigation the same litigation we're

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2 here today for.

3 You understand that?

4 A. I do.

5 Q. Okay. Other than the March 20, 2005
6 deposition have you ever testified under oath
7 regarding Camp Lejeune before?

8 MS. O'LEARY: Object to
9 foundation.

10 THE WITNESS: I do not recall. I
11 would have to look at my CV for that because all the
12 cases that were either deposition or trial testimony
13 are listed in my CV all of them in my in my full CV.

14 BY MS. BAUGHMAN:

15 Q. Not in the CV that was produced here
16 today correct?

17 A. I don't know.

18 Q. Well let's look at that then.

19 MS. BAUGHMAN: I'm marking as
20 Exhibit 31 your December 9, 2004 report that you
21 produced in this case.

22 (Document marked for
23 identification as Exhibit 31.)

24 BY MS. BAUGHMAN:

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2 Q. And there is an exhibit to your report
3 that has your CV and take a look at that and let me
4 know if you've ever testified before regarding Camp
5 Lejeune other than on March 20, 2025.

6 A. (Reviews document.)

7 I have to find it in this document.

8 Q. Yeah.

9 A. (Reviews document.)

10 Q. It's Attachment A. There you go.

11 A. I just found it.

12 Q. So fifth page of the Attachment A
13 provides deposition experience but it's only 2020 to
14 present.

15 And my question is not limited to that.

16 I'm asking have you ever testified regarding Camp

17 Lejeune?

18 A. Again, you know, my full CV I guess is
19 accessible on the webpage of my company and here for
20 this report I was I was asked or directed to
21 basically provide information as far as my
22 testimonies were concerned for the last four or five
23 years. That's what I -- that's what I recall.

24 Q. Okay. So based on your memory you're

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2 saying you don't know whether you've ever testified
3 under oath before March 20, 2025 regarding Camp
4 Lejeune; is that correct? You don't remember?

5 A. Well, I know I did some reports. I did
6 some declarations and I it has been 20 years span
7 that we are talking about and my memory I do not
8 have an answer for you that will be detailed.

9 Q. But if I go online on your company's
10 website that list that provides the full list of
11 your prior testimony and that will give me the
12 answer. Is that what you're saying?

13 A. That's what I am saying.

14 Q. Okay. Thank you.

15 Has all of your work related to Camp

16 Lejeune been on behalf of the Department of Justice?

17 A. Yes.

18 Q. And has all of your work related to Camp
19 Lejeune been related to litigation matters?

20 A. I believe so but I am -- it could have
21 been that I may have been asked to do some
22 consulting at some point. I -- but by and large it
23 was always related to some type of litigation.

24 Q. Who asked you to do non-litigation

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2 consulting related to Camp Lejeune?

3 MS. O'LEARY: Object to
4 foundation.

5 THE WITNESS: I don't know if I
6 ever did that and I don't know much. I wouldn't
7 know who ask me to do anything like this. But we're
8 talking about 20 years and, you know, I am a
9 consultant. So sometimes I am asked questions about
10 being retained as an expert.

11 BY MS. BAUGHMAN:

12 Q. Okay. As your based on your best
13 recollection today, can you identify any
14 non-litigation work you've ever done related to Camp

15 Lejeune?

16 A. Right here I cannot identify any.

17 Q. Okay.

18 A. At this today.

19 MS. BAUGHMAN: I'm going to hand
20 you what I've marked as Exhibit 32 to your
21 deposition.

22 (Document marked for
23 identification as Exhibit 32.)

24 BY MS. BAUGHMAN:

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2 Q. Here you go.

3 A. Thank you.

4 Q. And Exhibit 32 is Bates-stamped CLJA
5 underscore US T02-0000522322 through 323. It's an
6 e-mail chain. I'm going to direct your attention to
7 the e-mail in the first page at the bottom half of
8 the page from you to Adam Bain subject building 902.

9 Do you see that?

10 A. Yes, I do.

11 Q. Okay. And this e-mail you're writing to
12 Mr. Bain and you're recommending you see in that
13 second paragraph that four boreholes be constructed

14 to establish the groundwater flow direction in the
15 area of building 902.

16 Do you see that?

17 MS. O'LEARY: Object to form and
18 foundation.

19 THE WITNESS: I see that.

20 BY MS. BAUGHMAN:

21 Q. Okay. And in the fourth paragraph of
22 that e-mail you say.

23 In the new borings groundwater samples
24 should be collected at the water table and deeper at

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2 20 feet depth increments and analyzed for TCE and
3 PCE.

4 Do you say that -- you see that?

5 A. I see that.

6 Q. And then the next paragraph you say.

7 Soil samples should be collected in one
8 borehole at depths of about 20, 40 and 80 feet and
9 analyzed for their fraction organic carbon.

10 You see that?

11 A. I see that.

12 MS. O'LEARY: Object to

13 foundation.

14 BY MS. BAUGHMAN:

15 Q. Okay. Why were you making these
16 recommendations regarding boreholes groundwater
17 samples and soil samples in September of 2006?

18 A. Well, I -- my recollection is at the
19 time I was trying to understand where the
20 contamination was coming from to some water supply
21 ways that were contaminated. That's that's a reason
22 why I was doing this. That was part of the first
23 phase of things that I did after having been
24 retained by the DOJ.

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2 Q. So so this was the request for the
3 drilling of the boreholes and the groundwater
4 samples and the soil samples was done in connection
5 with litigation that the DOJ hired you to work on;
6 is that correct?

7 A. Well, my recollection is is that I was
8 just trying to understand the sources.

9 Q. For what purpose?

10 A. For the purpose of why was it
11 contamination in the water supply.

12 Q. But why?

13 A. In certain specific wells and if I
14 recall for this that was I think the wells were 6 or
15 600 series of wells along there.

16 Q. And that Hadnot Point area?

17 A. In the Hadnot Point.

18 Q. Okay. But I guess you were hired to do
19 this work by someone right? I mean, you weren't
20 doing it for your own edification?

21 A. I think that was part of what I was
22 hired for in in for the Camp Lejeune issue. I think
23 at the beginning there was some unknown as far as
24 certain wells had contamination and in order to

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2 understand that I wanted to understand where it come
3 from.

4 Q. So?

5 A. Where it came from. Sorry.

6 Q. Right. So you're e-mailing Mr. Bain.

7 You're clearly doing this work for the Department of
8 Justice correct?

9 A. Yeah yeah yeah. Yes.

10 Q. Okay. For the litigation?

11 A. That's my understanding yeah.

12 Q. Well, for example, did you do any work
13 to help remediate the Camp Lejeune site?

14 A. No, I did not do remediation work.

15 Q. Okay.

16 A. But the information that I recommended
17 be acquired I suppose was relevant what I did but it
18 might have been relevant to what other people did
19 who might have been basically involved in the
20 remediation work.

21 Q. But that wasn't your purpose in doing
22 this?

23 A. No.

24 Q. Okay. So I'm handing you what's marked

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2 as Exhibit 33 to your deposition.

3 (Document marked for
4 identification as Exhibit 33.)

5 BY MS. BAUGHMAN:

6 Q. And Exhibit 33 is Bates-stamped CLJA
7 underscore U.S. T020000523534. And this is just a
8 one paragraph e-mail from Scott Williams to Robert
9 lauder on June 8, 2007 and it says.

10 Bob this is from Scott.

11 Bob I just spoke with Remy Hennet. He
12 formed me that he has the data he needs.

13 And if you go down toward the bottom of
14 the e-mail the second to last line it says.

15 As far as Remy is concerned it is the
16 CERCLA team's call he has what he needs.

17 Do you know what what you needed at that
18 time? Do you remember this?

19 A. Vaguely but if I recollect what I needed
20 was understanding the direction of groundwater flow
21 around well 600 series and and I also wanted to have
22 basically measurements of the fraction organic
23 carbon in the groundwater environment and that's
24 what I recall. That's what I needed.

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2 Q. Okay. Do you remember -- did you ever
3 request any other testing be done at Camp Lejeune
4 other than the e-mails I've just shown you?

5 A. No. The exception would be recently I
6 had -- before my expert report I had asked via
7 counsel for the the water treatment personnel to
8 measure something in the related to a spiractor.

9 Q. Okay.

10 A. Effluent pipe.

11 Q. Yes. We're definitely going to talk

12 about that.

13 So other than the requests that are

14 documented in Exhibits 32 and 33 that we just talked

15 about and your request for a measurement of the

16 spiractor pipe at the Water Treatment Plant have you

17 ever requested any other testing be done at Camp

18 Lejeune?

19 A. I don't recollect any.

20 Q. Okay. So in your last deposition you

21 testified that you had been to Camp Lejeune three

22 times.

23 Is that consistent no, that's not right.

24 Three times in this case is that correct?

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2 A. That's what I recall yes.

3 Q. Okay. Do you know how many other times

4 you've been to Camp Lejeune other than for the

5 purpose of this case?

6 A. I do not recall exactly but there were

7 instances where I went to do site visit at Camp

8 Lejeune, yes, and probably early on as that's what I
9 recall.

10 Q. Okay. Each time you went that would
11 have been for purposes of litigation matters for the
12 DOJ; right?

13 A. Yes.

14 Q. Okay. Okay. I'm handing you what we've
15 marked as Exhibit 34 to your deposition.

16 (Document marked for
17 identification as Exhibit 34.)

18 BY MS. BAUGHMAN:

19 Q. And this is the supplemental and
20 corrected reliance list that was provided to us by
21 DOJ in February of 2025.

22 Let me also -- I already -- what's the
23 exhibit number for the report? Can you remind me?
24 Is that?

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2 A. For the report? I'm sorry.

3 MS. O'LEARY: 31.

4 THE WITNESS: 31.

5 BY MS. BAUGHMAN:

6 Q. Thank you.

7 All right. Does the supplemental and
8 corrected reliance list list all of the documents
9 that you reviewed and you're relying on for your
10 opinions in this case?

11 A. Well, I have access to the full set of
12 documents via, you know, a portal I guess but those
13 are the ones that I suppose.

14 Q. Okay. What do you mean by the full set
15 of documents in the portal what are you referring to
16 there?

17 A. Well, I am referring to I guess those
18 those documents which the ones cited in my report
19 and I had access to the -- to all the documents and
20 that's what I recall. Specific documents I don't by
21 memory remember exactly what those documents would
22 have been without seeing them, you know.

23 Q. All right. So you understand that the
24 federal rules require you to provide a list with

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2 your report of the documents that you've reviewed
3 and that you're relying on for your opinions in this
4 case and counsel has provided us with this
5 supplemental and corrected reliance list.

6 And I'm trying to figure out if there
7 are any other documents that you plan to rely upon
8 for your opinions in this case that are not listed
9 on Exhibit 34.

10 Are you aware of any?

11 A. I am not aware of any that would be
12 specific to to Camp Lejeune. You know, I have books
13 that I use and if a question comes I may just, you
14 know, that's basically based on all my knowledge
15 experience education.

16 Q. Okay. As you sit here today can you
17 identify any document, book, anything that you are
18 relying on for your opinions in this case?

19 A. No.

20 Q. That's not listed in Exhibit 34?

21 A. Not to my knowledge.

22 Q. Okay. So you've provided two errata
23 sheets like corrections to your report as part of
24 this litigation. Most of it was like corrections to

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2 citations to documents.

3 Other than what was contained on those
4 errata sheets, have you identified any other changes

5 that you wish to make to your expert report Exhibit
6 31?

7 A. No, I have not. It may be some spelling
8 mistakes or I for they, you know, because of my
9 French accent sometimes when I say he they.

10 Q. Okay. Let's talk about substantive
11 substantive changes not not grammatical or spelling
12 issues.

13 Can you identify any substantive change
14 that you would like to make to your report Exhibit
15 31?

16 A. I have no substantive changes to be
17 made.

18 Q. Okay.

19 A. With the exception of you can have some
20 confusion between an I and a they as far as the
21 meaning of the sentence right.

22 Q. Okay. I want to go back to ask you a
23 few questions about your CV.

24 So that again Exhibit?

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2 A. 31.

3 Q. 31 is your report and your CV is

4 attached as Attachment A and actually I was going to
5 ask you if exhibit if the CV that's attached as
6 Attachment A to your report is a true and correct
7 copy of your current CV but it's not right? Your
8 current CV is actually what's on your website; is
9 that fair?

10 A. Well, this is with the last four years
11 of testimony or trial appearances whereas my CVs
12 that you can find on our website may have something,
13 everything I ever done as a professional for
14 deposition or trial appearances and, you know, it
15 doesn't stop at 2020 in that case.

16 Q. Okay. With the exception of the list of
17 your prior testimony, is this the CV attached as
18 Attachment A to your report a true and correct copy
19 of your current CV?

20 A. I believe so.

21 Q. Okay. On the first page in the first
22 paragraph at the top there is a sentence that says.

23 Dr. Hennet is often retained as an
24 expert witness for litigation and providing services

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2 to industry, law firms and the U.S. Department of

3 Justice.

4 Do you see that?

5 A. I do.

6 Q. Okay. And that's true; right?

7 A. That is true.

8 Q. Can you tell me like over the past year

9 let's say what percentage of time you work on

10 litigation matters as opposed to other work?

11 A. Well, roughly over the past year

12 especially I have done more litigation related work

13 than I did over my career right.

14 Q. Okay.

15 A. And.

16 Q. So I'm going to break it down in

17 different time frames. First just ask for the last

18 year and then we'll go backwards okay.

19 So over the last year can you estimate

20 is your work 50 percent litigation or or more or

21 less? What can you tell me?

22 A. Well, 50 percent is a good guess.

23 Q. Okay.

24 A. Right.

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2 Q. And over let's say five years over the
3 last five years what percentage of your time would
4 be litigation related?

5 A. It would be a little bit less than
6 presently.

7 Q. So maybe 40 percent? 30 percent?

8 A. That's a good guess as well.

9 Q. Okay. Have you ever been retained by a
10 Plaintiffs Leadership Group or a group of plaintiffs
11 who were injured or claimed they had been injured
12 from exposure to toxic substances to be an expert in
13 that kind of a case?

14 A. That could have been. You know, I have
15 done work for all kind of -- all kind of parties if
16 you wish that included, you know, Sierra Club, for
17 example, I have worked for the Sierra Club. River
18 keepers I guess I did some work for this type of
19 group. I have done industry work and as far as
20 having a role as an expert within potential on the
21 Plaintiffs Leadership Group side I think there was
22 some -- one case come up to mind for me is St. Croix
23 in the U.S. Virgin Islands I did some work there for
24 evaluating contamination at the refinery former

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2 refinery and.

3 Q. So I read something about that. In that
4 case you were hired by the government right of St.
5 Croix?

6 A. A law firm and I think the law firm was
7 actually representing the government of St. Croix.

8 Q. Right.

9 A. That's that's what I recall.

10 Q. So so can you recall ever working on a
11 case where you were retained by lawyers who were
12 representing people who claimed they had been
13 injured because they were exposed to contaminants in
14 the environment?

15 A. Yeah, I understand your question and I,
16 you know, I have been retained maybe in several
17 dozen cases that and probably and the cases I'm
18 talking about went to either deposition or trial
19 appearances. But there are also many other cases
20 where I was retained that never went to deposition
21 or, you know, they settled those things like those
22 things. And my goal of this, specifically right now
23 I cannot give you one specifically right now, but I
24 believe there might have been some.

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2 Q. But you can't identify -- just let me
3 finish the question.

4 As you sit here today, you can't
5 identify a case where a lawyer representing someone
6 injured from exposure to a toxic substance hired you
7 as an expert; is that fair?

8 A. Right now I cannot.

9 Q. Okay.

10 A. Give you a case.

11 Q. Okay. Would it also be fair to say that
12 the majority of your litigation work has been either
13 on behalf of industry or the government?

14 A. Well, as far as a number of cases are
15 concerned, I have worked for plaintiffs and
16 defendants. I have worked for the government but I
17 have also worked for utilities. I have, you know,
18 and I have worked for organizations as I mentioned
19 before. And if you if you were to count the number
20 of cases for plaintiffs number of cases for
21 nonplaintiffs, I mean, maybe a third for plaintiffs
22 and the rest for nonplaintiffs.

23 Q. Right.

24 A. But some some of the plaintiffs work may

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2 be a bit shorter sometimes.

3 Q. But some of the plaintiffs you worked
4 for were were industry right? Sometimes it's one
5 company suing another company?

6 A. No no. You have some of that but you
7 have some which are basically associations, for
8 example, having issues with sewer systems or or, you
9 know, I did work for the Hudson river organization.
10 So you have some of those and those are I would put
11 them in the bucket of plaintiffs.

12 Q. Okay. But the majority of your work has
13 been on behalf of industry or the government that's
14 litigation related; right? More than half?

15 A. If you if you sum government plus
16 industry it may be little bit more than half.

17 Q. Okay. I'm going to ask you about your
18 areas of expertise.

19 On your CV on the right-hand side like
20 the blue portion it gives example areas of
21 expertise.

22 Do you see that?

23 A. Example? Yes, I see that.

24 Q. Okay. And in addition like that in that

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2 first paragraph you wrote.

3 His areas of expertise include and it
4 says the analysis of geochemical fingerprints for
5 organic and inorganic compounds including
6 radionuclides and stable isotopes, the evaluation of
7 the timing of chemical releases, the allocation of
8 responsibility for cause allocation and geochemical
9 modeling.

10 Do you see that?

11 A. You're talking about the first paragraph
12 of the CV?

13 Q. Yes.

14 A. Yeah, well it sounds right.

15 Q. Okay. Do you consider yourself to be an
16 expert in groundwater modeling?

17 A. Well, I am educated in groundwater
18 modeling. I'm -- I have a university degree and I
19 hold geologies that included that, but my company is
20 really a leader in that and we have people in the
21 company that are, you know, that I rely upon for for
22 modeling specifically.

23 Q. Sure. I understand that.

24 So I'm not questioning about your

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2 company or anyone else I'm just talking about you.

3 Do you do you yourself to be an expert
4 in groundwater modeling?

5 A. I am educated in groundwater modeling
6 and you have to define what an expert is.

7 Q. Okay. So your education in groundwater
8 modeling was from your diploma from Switzerland is
9 that right?

10 A. That's correct.

11 Q. In 1980?

12 A. That's correct.

13 Q. Okay. Have you --

14 A. I would add plus the exposures that I
15 have had through the years being working in a firm
16 that does a lot of groundwater modeling.

17 Q. Okay. Have you published any articles
18 in the peer-reviewed literature regarding
19 groundwater modeling either flow or fate and
20 transport or any other kind of groundwater modeling?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: Combined with
23 geochemical modeling I have actually, you know, done
24 some movement of certain contaminant in the

↑

29

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 subsurface. You need both. You need what makes it
3 move is actually the groundwater movement and the
4 geochemical aspect of it is is was part of that.
5 And I believe, I believe I have -- I co-authored a
6 paper on some -- on one case maybe four. That was
7 arsenic as I recall.

8 BY MS. BAUGHMAN:

9 Q. Okay. So you've got your CV in front of
10 you.

11 A. Yes.

12 Q. Which has a publication list.

13 Can you identify which peer-reviewed
14 publications you have that you're an author of that
15 are concerned with groundwater modeling?

16 A. Yes, that is. By that you mean that is
17 an aspect of groundwater modeling included in it and
18 and that's important.

19 I -- the papers that I published with
20 the second one on the list Bessinger and Hennet

21 2019. So that's the one I was that came to mind
22 when you asked me that question. And in that one
23 you have the movement of arsenic on its reaction its
24 fate and transport when water recharges to an

↑

30

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 aquifer and so that's that one combined some
3 groundwater flow.

4 Q. I just need the list for now. Any
5 others?

6 A. Yeah.

7 MS. O'LEARY: Object to form.

8 THE WITNESS: Be patient. It's a
9 long list. So.

10 (Reviews document.)

11 I believe the 2007 paper with
12 Soderberg in it. Soderberg is S-o-d-e-r-b-e-r-g.
13 Also involved some combination of geochemistry and
14 groundwater movement.

15 BY MS. BAUGHMAN:

16 Q. Okay. You know what. Let's let me
17 withdraw that question and I'm going ask you a
18 different question.

19 Let me ask you. Have you yourself ever

20 developed a groundwater flow model?

21 A. Yes, I have as part of my education.

22 Q. Okay. When you were in school?

23 A. When I was at the university, yes.

24 Q. Okay.

↑

31

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. That was part of what we would do.

3 Q. Okay. After you graduated in 1980 from

4 with that diploma from Switzerland have you

5 developed a groundwater model since then?

6 MS. O'LEARY: Object to form.

7 THE WITNESS: Simple, simple

8 model if you want to call it a model, calculations

9 of groundwater movement and so on, I have done that.

10 BY MS. BAUGHMAN:

11 Q. Okay. I'm not talking about

12 calculations. I'm talking about an actual model.

13 MS. O'LEARY: Object to form.

14 THE WITNESS: Well, define a

15 model. A model is a set of calculations.

16 BY MS. BAUGHMAN:

17 Q. Okay. You're familiar with the type of

18 model that we're talking about here in this case

19 that the ATSDR developed; correct?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: Yes, I have -- I
22 have looked at it, yes.

23 BY MS. BAUGHMAN:

24 Q. Okay. Have you ever run that model?

↑

32

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. Personally I have not. That was done by
3 my colleague.

4 Q. Okay. Have you ever -- so the ATSDR
5 developed multiple groundwater models that are at
6 issue in this litigation; fair? It's more than one;
7 right?

8 A. It's two.

9 Q. Okay. Have you developed a different
10 groundwater model related to Camp Lejeune?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: Again it's
13 definition of a model. If a model is a calculation
14 I have done a calculation.

15 BY MS. BAUGHMAN:

16 Q. Okay. And those are the calculations
17 discussed in your report?

18 A. Yes.

19 Q. Okay. Did you assess the model bias for
20 your groundwater flow model that you've done for
21 Camp Lejeune?

22 A. Can you explain what you mean by bias.

23 Q. Well let me ask you this.

24 What sensitivity or uncertainty analysis

↑

33

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 did you do for your groundwater model for Camp
3 Lejeune?

4 A. I.

5 MS. O'LEARY: Object to form.

6 BY MS. BAUGHMAN:

7 Q. If any?

8 A. What I what I did did not require that
9 because it is included in in it because because of
10 the lack of data and so on and, you know.

11 Q. Okay. So did you do a sensitivity
12 analysis for what you're calling your model for Camp
13 Lejeune?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: I didn't do a
16 sensitivity analysis.

17 BY MS. BAUGHMAN:

18 Q. Okay. Did you do an uncertainty
19 analysis for what you're calling your model for Camp
20 Lejeune?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: I didn't do
23 specifically an uncertainty analysis. I am just
24 aware that you have very large amount of uncertainty

↑

34

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 for whoever makes calculations when you have no
3 data.

4 BY MS. BAUGHMAN:

5 Q. You're your testimony is there's no data
6 literally none zero data related to Camp Lejeune is
7 that what you're saying?

8 A. Well, you have very limited data as far
9 as as contamination is concerned and then you have
10 site-specific data and you have basically, you know,
11 hydrological framework that is simplified and all of
12 that is allowed amount of uncertainty.

13 Q. Have you ever made a presentation at a
14 conference regarding groundwater flow or fate and
15 transport modeling?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: I believe so.

18 BY MS. BAUGHMAN:

19 Q. Okay. Have you ever received an honor
20 or award from your work on groundwater modeling?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: Not on groundwater
23 modeling, no.

24 BY MS. BAUGHMAN:

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35

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Q. Have you ever published anything related
3 to Camp Lejeune?

4 A. No.

5 Q. Have you ever made a presentation a
6 public presentation at a conference, for example,
7 related to Camp Lejeune?

8 A. No.

9 Q. Okay. Are you an epidemiologist?

10 A. I am not an epidemiologist.

11 Q. Are you a toxicologist?

12 A. I am not a toxicologist.

13 Q. Have you reviewed any of the
14 epidemiology studies published by the ATSDR

15 regarding Camp Lejeune?

16 A. I I recall having seen some of that.

17 Q. So I reviewed your Exhibit 34 your
18 supplemental and corrected reliance list and I did
19 not see any of the published peer-reviewed
20 epidemiology studies that Dr. Bove and others have
21 published regarding Camp Lejeune listed on your
22 reliance list.

23 Did you review those epidemiology
24 studies as part of your work on this case?

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 MS. O'LEARY: Object to foundation
3 and form.

4 THE WITNESS: Not on this case.
5 I am not relying on that in this case.

6 BY MS. BAUGHMAN:

7 Q. Okay. Have you yourself ever conducted
8 an exposure assessment for an individual person, in
9 other words, to determine how much of a chemical the
10 person was exposed to by inhalation, ingestion,
11 and/or dermal contact?

12 A. No, I have -- I have worked on issues
13 that relate to geochemistry and hydrogeology that

14 deal with concentrations and but I don't go to the
15 exposure. I don't go to the inhalation I don't go
16 to those kinds of things.

17 Q. Okay. Is that because calculating the
18 exposure for individual person is not part of the
19 your expertise?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: It's not what I do.

22 BY MS. BAUGHMAN:

23 Q. Okay. What about I think I know the
24 answer but for this case, the Camp Lejeune

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37

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 litigation, have you calculated the exposure of any
3 individual person to the contaminants at Camp
4 Lejeune?

5 A. I have not done such calculations. That
6 will be specific like that.

7 Q. So can you identify as you sit here
8 today any individuals or any group of individuals
9 that you would say were substantially exposed to
10 contaminated water at Camp Lejeune?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: What I have done is

13 I have reviewed the information and the data and I
14 have made my conclusions that are in my report for
15 this case and, you know, the other case I worked on
16 which is different from this one where I looked at
17 concentration potential in the water supply, in the
18 waters that was basically supplied to the person for
19 small period of time, that's Washington case if I
20 recall.

21 BY MS. BAUGHMAN:

22 Q. The baby Washington case right?

23 A. Yeah, so I have done that but for this
24 case for this report I have not done. I have just

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 looked at the geochemistry and the hydrogeology and
3 the geology.

4 Q. Okay. So you're not going to offer an
5 opinion to any of the judges in this case about any
6 individual person or any group of people as to
7 whether they were or were not substantially exposed
8 to contaminated water at Camp Lejeune; is that fair?

9 MS. O'LEARY: Object to form and
10 foundation.

11 THE WITNESS: Yeah, I am not

12 putting any opinions that are not in my report.

13 BY MS. BAUGHMAN:

14 Q. Okay. And that's not in your report is
15 it?

16 A. It is not -- it is not in my.

17 Q. Okay.

18 A. Because the opinions in my report speak
19 for themselves.

20 Q. Okay. And you have not offered an
21 opinion in your report about whether any individual
22 person or any group of people was substantially
23 exposed to contaminants at Camp Lejeune; fair?

24 MS. O'LEARY: Object to form.

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 THE WITNESS: I have not done
3 that for people, no.

4 BY MS. BAUGHMAN:

5 Q. Okay. Have you ever developed or used a
6 water model to determine contaminant concentrations
7 that would be used for an individual exposure
8 determination?

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: Not that I can

12 recall here.

13 BY MS. BAUGHMAN:

14 Q. Okay.

15 A. With the exception of -- well there is
16 no exception.

17 Q. Okay.

18 A. I cannot recall.

19 Q. I'm going to ask you a few questions
20 about the experts for the plaintiffs in this case.
21 Okay? I'll -- I'll ask one by one.

22 Let me ask you about Dr. Leonard Konikow
23 or Lenny Konikow.

24 Do you know him?

↑

40

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. I know him socially.

3 Q. Okay. Have you ever worked with
4 Dr. Konikow?

5 A. No.

6 Q. Okay. Are you aware of his reputation
7 in the hydrogeology or groundwater field?

8 A. Yes, he's a reputable hydrogeologist
9 that worked for the USGS.

10 Q. Reputable is that what you said?
11 A. Yeah.
12 Q. Okay. What about Morris Maslia do you
13 know him personally?
14 A. I do not.
15 Q. Okay. You've never worked with Morris
16 then I assume?
17 A. With who.
18 Q. Mr. Maslia?
19 A. No, I have not.
20 Q. Okay. Norm Jones and Jeff Davis the two
21 individuals who did the post-audit.
22 Do you know them?
23 A. I do not.
24 Q. Are you aware of their reputation in the

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 hydrogeology or groundwater modeling community?
3 A. I do not.
4 Q. Okay. Dr. David Sabatini do you know
5 him?
6 A. Except for this case I have never met
7 him or I don't know him.
8 Q. Okay. And are you aware of his

9 professional reputation?

10 A. No.

11 Q. Okay. Have you ever communicated with

12 Dr. Clement regarding Camp Lejeune?

13 A. Dr. What.

14 Q. Clement. The individual who wrote part

15 of the NRC report and published an article. He's

16 discussed I believe in your report.

17 A. No.

18 Q. He's certainly discussed in

19 Dr. Spiliotopoulos's report?

20 A. Yeah, I.

21 MS. O'LEARY: Object to form.

22 THE WITNESS: I do not know him.

23 BY MS. BAUGHMAN:

24 Q. You don't know Dr. Clement?

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. I don't.

3 Q. Okay. So obviously you have not

4 communicated with him about Camp Lejeune then?

5 A. I don't believe so.

6 MS. BAUGHMAN: Let me see here.

7 (Document marked for

8 identification as Exhibit 35, 36, 37.)

9 BY MS. BAUGHMAN:

10 Q. Okay. I am going to hand you in a
11 moment I need to read this out first. I'm going to
12 hand you what I've marked as Exhibits 35, 36 and 37
13 to your CV. And those are a series of documents
14 with the first part of the Bates stamp series saying
15 CLJA underscore SSPA underscore invoices and then
16 there are numbers. 35 goes 1 through 41. 36 goes
17 43 through 287. And then 37 goes 288 through 407.
18 Okay?

19 And I believe these are all of the
20 invoices that have been produced to us regarding
21 SSPA's that's SS Papadopoulos & Associates work
22 related to Camp Lejeune?

23 A. Thank you.

24 Q. And can you confirm that for me.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. What is your question?

3 Q. Okay. Are Exhibits 35, 36 and 37 SSPA's
4 invoices regarding work related to Camp Lejeune?

5 MS. O'LEARY: Object to
6 foundation.

7 THE WITNESS: (Reviews document.)
8 MS. O'LEARY: Also object to form.
9 THE WITNESS: (Reviews document.)
10 MS. O'LEARY: Dr. Hennet, are you
11 waiting for a question or?
12 MS. BAUGHMAN: I asked you a
13 question.
14 Could you repeat it please?
15 (The reporter read the record on
16 page xx lines xx-xx.)
17 THE WITNESS: They appear to be.
18 I am not the one who make this kind of invoices. I
19 am not making invoices. I am not doing the
20 administrative work at SSPA.
21 BY MS. BAUGHMAN:
22 Q. Okay. But you've just spent a few
23 minutes flipping through Exhibits 35, 36 and 37 and
24 those appear to be invoices from your company SSPA;

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 correct?
3 A. It appears to be.
4 Q. And they are related to Camp Lejeune;
5 correct?

6 A. Well, I believe so.

7 Q. Okay. And they document work from 2005

8 all the way until February of 2025 related to Camp

9 Lejeune; correct?

10 MS. O'LEARY: Object to

11 foundation.

12 THE WITNESS: 2005?

13 BY MS. BAUGHMAN:

14 Q. Yes.

15 A. I -- I'm sorry I didn't spot any 2005

16 invoices.

17 Q. Let's look. If you look at Exhibit 36.

18 A. Yes.

19 Q. Hold on a minute.

20 No, I'm sorry Exhibit 37. And turn to

21 the one that's stamped page 340.

22 A. Yeah.

23 Q. So at page 340 let me ask you about

24 this.

↑

45

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 This is a page from 340 until 345 is a

3 timesheet backup report for billing to the DOJ of

4 SSPA from January 23, 2005 until October 27, 2007.

5 Do you see that?

6 A. I see that.

7 Q. Okay. And then if you turn to page 346,
8 that invoice is for professional services rendered
9 for the period January 23, 2005 until March 19,
10 2005.

11 Do you see that?

12 A. I see that.

13 Q. And based on the testimony you've given
14 today and in the prior deposition, you didn't work
15 on Camp Lejeune related matters for the DOJ before
16 January 23, 2005; right?

17 MS. O'LEARY: Object to
18 foundation.

19 THE WITNESS: That's my
20 understanding.

21 BY MS. BAUGHMAN:

22 Q. Okay. So and then and then in terms of
23 the range of what we've got here, if you go to
24 Exhibit 35 and you go to the end of that page 42?

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. Wait hold on. Page?

3 Q. 41 actually.

4 A. Yes.

5 Q. So that invoice is for services rendered
6 through January 31, 2025.

7 Do you see that?

8 A. Yes.

9 Q. Okay. I'm guessing you don't know the
10 answer.

11 I've just established we have a range of
12 invoices that start in January of 2005 and end in
13 January 2025.

14 To the best of your knowledge, have all
15 of the invoices for SSPA's work related to Camp
16 Lejeune been produced in the plaintiffs in this
17 case?

18 MS. O'LEARY: Object to form and
19 foundation.

20 BY MS. BAUGHMAN:

21 Q. In that time frame.

22 MS. O'LEARY: Same objections.

23 THE WITNESS: I am not the one
24 who produced those. So I don't know.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 BY MS. BAUGHMAN:

3 Q. Okay.

4 A. But I suppose they're all there.

5 Q. I mean, you haven't purposefully told
6 anyone to not produce them have you?

7 A. I have not. I have nothing to do with
8 this.

9 Q. Okay. You're aware that there were
10 motions filed and as a result of that that the DOJ
11 attempted to produce all of the invoices that SSPA
12 had to go and look for these.

13 Are you aware of that?

14 MS. O'LEARY: Object to
15 foundation.

16 THE WITNESS: Vaguely yes, I was
17 out of the country for, you know, two and a half
18 weeks. I just came back this weekend and I think
19 that all happened during that period of time.

20 BY MS. BAUGHMAN:

21 Q. Okay.

22 A. And I, you know, so if, if you requested
23 all the invoices from my -- from my shop, from SSPA,
24 I suppose that I will have done the best I could to

↑

48

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 provide that.

3 Q. And you certainly wouldn't have withhold
4 them?

5 A. Pardon.

6 Q. You would not have withheld them?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: No.

9 BY MS. BAUGHMAN:

10 Q. And obviously you Flip through these
11 documents. SSPA has a logo right?

12 A. SSPA has a logo yes.

13 Q. And so on page on Exhibit 35 at the top
14 of the page that's SSPA's logo; right?

15 A. Yes, it is.

16 Q. And it appears at least we can tell on
17 the first page of each Exhibit 35, 36 and 37 it's
18 all the same logo; right?

19 A. Yeah, except that it's in color.

20 Q. Right.

21 A. On the first one and not in the other
22 one.

23 Q. Got it.

24 So let me ask you something.

↑

1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 If you look at Exhibit 35 and you go to
3 the last page which is page 42.

4 A. Yes.

5 Q. Okay. The billed to date on that
6 invoice which is invoice 27722 is 2 million
7 400 -- I'm sorry -- \$2,004,131.67.

8 Do you see that?

9 A. I see 2 million 216.

10 Q. That's the budget.

11 A. Oh, that's the budget. Okay.

12 Q. If you go down to billed to date?

13 A. Okay. I'm sorry. I see that.

14 Q. Okay. So billed to date as of January
15 31, 2025 was just over 2 million dollars; right?

16 A. That's what the it appears to be.

17 Q. Okay. But that's just for -- that's
18 just for the litigation that we're here for today.
19 That doesn't include the prior litigation matters;
20 correct?

21 MS. O'LEARY: Object to form and
22 foundation.

23 THE WITNESS: That's my
24 understanding.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 BY MS. BAUGHMAN:

3 Q. Okay. Do you know what the total amount
4 of money is that SSPA has billed DOJ for all of your
5 Camp Lejeune related work 2005 to present?

6 A. I do not know.

7 Q. Okay. But we could add up all of these
8 invoices and come up with a number and that would be
9 the number as far as you know; correct?

10 MS. O'LEARY: Object to
11 foundation.

12 THE WITNESS: Specifically I do
13 not know. I suppose.

14 BY MS. BAUGHMAN:

15 Q. Okay.

16 A. If you if you add those numbers maybe
17 you -- you get a number somehow.

18 Q. Is there any reason that you're aware of
19 that if we added up all of the invoices from
20 Exhibits 35, 36 and 37 and came up with a number is
21 there any reason you're aware of that that would not
22 be the correct number for the amount of money that
23 SSPA has billed DOJ for Camp Lejeune related work?

24 MS. O'LEARY: Object to

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 foundation.

3 THE WITNESS: I suppose this
4 speaks for itself. I have nothing to do with this
5 this piece.

6 BY MS. BAUGHMAN:

7 Q. Can you identify any reason that that
8 wouldn't work out as the appropriate methodology can
9 you?

10 MS. O'LEARY: Object to form.

11 THE WITNESS: I cannot see any
12 why reason it couldn't be.

13 Q. Okay.

14 MS. O'LEARY: And now would be an
15 okay time for a short bio break.

16 MS. BAUGHMAN: Yes.

17 THE WITNESS: I was going to ask
18 for that as well.

19 THE VIDEOGRAPHER: The time is
20 10:18. We are going off the record.

21 (A recess was taken.)

22 THE VIDEOGRAPHER: The time is
23 10:28 AM. We are now on the record.

24 BY MS. BAUGHMAN:

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Q. Okay. All right. Dr. Hennes I want to
3 ask you some questions about we're going to talk
4 about the spiractor fall height issue but let me
5 give you some exhibits so that we have some things
6 to talk about.

7 I'm going to hand you first what I've
8 marked as Exhibit 38 to your deposition.

9 (Document marked for
10 identification as Exhibit 38.)

11 BY MS. BAUGHMAN:

12 Q. And it is the AH environmental report
13 from December 2004 CLJA water modeling 01-000071446
14 through 71512. There you go.

15 A. Thank you.

16 Q. I'm also going to hand you this one was
17 marked at your deposition in March as Exhibit 11.
18 So I'm not going to re-mark it. I'll just refer to
19 that as Exhibit 11 but give you a copy. And those
20 are your notes that you took from your February 2025
21 Camp Lejeune site visit; correct?

22 A. Yes.

23 Q. Okay. Now I'm going to hand you what
24 I've marked as Exhibit 39 to your deposition.

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 (Document marked for

3 identification as Exhibit 39.)

4 BY MS. BAUGHMAN:

5 Q. And these are Hennet underscore USAA
6 underscore a whole bunch of 0s and it's 1 through 96
7 and can you tell me. Are those the photographs that
8 were taken at your February 2025 site visit?

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: (Reviews document.)

12 It look like -- it looks like it.

13 BY MS. BAUGHMAN:

14 Q. Okay. And now I'm going to hand you
15 what I've marked as Exhibit 40 to your deposition.

16 (Document marked for

17 identification as Exhibit 40.)

18 BY MS. BAUGHMAN:

19 Q. And this is CLJA photos SSPA 1 through
20 45. And my question for you is: Is Exhibit 40
21 photographs that were taken of your visit in May

22 2024 to Camp Lejeune for this litigation?

23 MS. O'LEARY: Object to
24 foundation.

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 MS. BAUGHMAN: Foundation meaning
3 he doesn't know if these are photos? Is that what
4 you're saying?

5 MS. O'LEARY: Yeah, I don't know
6 that. I mean, this is the produced versions. I
7 don't know what he's seen. I believe he testified
8 that he wasn't the one who took photographs.

9 MS. BAUGHMAN: Okay. Well, let's
10 let's do this. For Exhibit 40 if you turn to -- so
11 I guess to establish a foundation for this. Your
12 your position is that we have to call the attorneys
13 for DOJ who took the photos?

14 MS. O'LEARY: I think you might
15 need to ask him more specific questions about what
16 he saw.

17 THE WITNESS: (Reviews document.)

18 BY MS. BAUGHMAN:

19 Q. Okay. Turn to page 17 of Exhibit 40.

20 Who's that a picture of?

21 A. I'll get there.
22 I am there.
23 It's a picture of myself and of
24 Dr. Alexander Spiliotopoulos.

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55

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 Q. Okay. And where are you?
3 A. I am -- on the picture I am on the
4 right.
5 Q. No. Where are you in the photo?
6 A. Oh.
7 Q. Where are you standing?
8 MS. O'LEARY: Objection. Form.
9 BY MS. BAUGHMAN:
10 Q. Where was the photo taken at?
11 A. That's near building 670 at at Camp
12 Lejeune.
13 Q. Okay. And what's building 670 do you
14 remember?
15 A. Yeah, it's one of the Water Treatment
16 Plant.
17 Q. Which one?
18 A. I think it's -- it is Holcomb Boulevard
19 Water Treatment Plant.

20 Q. All right. And where were you? Do you
21 remember when this photo was taken?

22 A. Exactly not, but I'm sure it's in the
23 record somewhere.

24 Q. Okay. Is it one of the times that you

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2 visited Camp Lejeune as part of this case?

3 A. Yes.

4 Q. Okay. And then if you turn to page 45,
5 the last page of Exhibit 40.

6 Is that also a picture of you and
7 Dr. Spiliotopoulos?

8 A. Yes.

9 Q. At Camp Lejeune?

10 A. Yes.

11 Q. Okay. So is Exhibit 40 pictures of your
12 visit one of your visits prior to 2025 at Camp
13 Lejeune?

14 A. I believe so.

15 Q. Okay. So if we look at your report
16 Exhibit 31. Your calculations -- let's see. Let's
17 look at page 5-6 of your report.

18 Are you at page 5-6?

19 A. Yes, I am.

20 Q. Okay. And that is Exhibit 2-4 COC
21 volatilization losses at Hadnot Point Water
22 Treatment Plant correct?

23 A. Yes.

24 Q. So this documents how you made your

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 calculations regarding volatilization losses for
3 Hadnot Point; correct?

4 MS. O'LEARY: Object to
5 foundation.

6 THE WITNESS: Yes, that is
7 information that support that yes.

8 BY MS. BAUGHMAN:

9 Q. Right. From your report?

10 A. That's in my report.

11 Q. Okay. So if you look at the fall height
12 in the middle of Exhibit 2-4 the fall height is
13 listed as 0.675 meters; right?

14 A. Yes.

15 Q. Okay. And 0.675 meters is 24 inches; is
16 that right?

17 A. About two feet, yeah.

18 Q. Two feet is 24 inches?
19 A. (Nods head).
20 Q. Yes?
21 A. Yes.
22 Q. Okay. And then and then so it's
23 clear -- it's true that when you for your
24 calculations of volatilization at the spiractor

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 Hadnot Point you assumed a fall height of 2 feet;
3 correct?
4 A. That's -- that's what I recall, yes.
5 Q. Okay. And that's what's documented in
6 your report?
7 A. Yes.
8 Q. Okay. And then if you turn to page 5-9
9 of your report, that's Exhibit 2-5 COC
10 volatilization losses at Tarawa Terrace Water
11 Treatment Plant correct?
12 A. Yes.
13 Q. Okay. And you have a fall height and
14 it's also listed as 0.675; correct?
15 A. Yes.
16 Q. So for your calculations of the fall

17 height at Tarawa Terrace, you also assumed 2 feet or
18 22 inches is the fall height correct?

19 A. Yes.

20 Q. Okay. So let's look at Exhibit 38 the
21 AH environmental report. And if you could turn to
22 page it's 3-10 in the report. The Bates stamp
23 numbers last three digits or last five digits are
24 71475.

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2 You see that?

3 A. Not yet.

4 Yes.

5 Q. Okay. So this is a diagram prepared by
6 AH environmental regarding the fall height of the
7 spiractor; correct?

8 A. Yes.

9 Q. And you're aware that AH environmental
10 made calculations regarding volatilization loss at
11 the spiractor; correct?

12 A. Yes.

13 Q. Using the same formula as you but they
14 used 1 foot or 12 inches for the fall height instead
15 of 2 feet correct?

16 MS. O'LEARY: Object to
17 foundation.

18 THE WITNESS: It's kind of
19 reverse I used the same formula as they.

20 BY MS. BAUGHMAN:

21 Q. You used the same formula as AH?

22 A. Yes.

23 Q. But you used 2 feet and they used 1
24 right?

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2 A. Yes.

3 Q. All right. Let me ask you.

4 Have you have you spoken to anyone from
5 AH environmental regarding the report Exhibit 38
6 their December 2004 report?

7 A. I have not.

8 Q. Okay. And just more broadly have you
9 spoken to anyone from AH environmental regarding the
10 spiractors and the fall height issue?

11 A. No, I have not.

12 Q. Okay. Do you know Dr. Peter Pommerenk?

13 A. I do not know him.

14 Q. Have you ever spoken to Dr. Pommerenk

15 about anything related to Camp Lejeune?

16 A. I don't believe so.

17 Q. Okay. What about anyone who worked for
18 SSPA? To your knowledge has anyone reached out to
19 Dr. Pommerenk or AH regarding any of the subject
20 matter in Exhibit 38, the AH environmental 2004
21 report?

22 A. Not to my knowledge.

23 Q. Okay. I want to ask you.

24 The first page of Exhibit 38 says that

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 this report was prepared for the environmental
3 management division at Camp Lejeune.

4 Do you see that?

5 A. I see that.

6 Q. And on page 1 of the report which is at
7 1-1 I think is what they refer to it as, at the
8 bottom of the page under purpose the last full
9 paragraph it says.

10 AH environmental consultants was
11 retained by MCB, which is MCB Camp Lejeune under
12 contract number and then there's a number; correct?

13 A. Correct.

14 MS. O'LEARY: Object to form.

15 BY MS. BAUGHMAN:

16 Q. So I just wonder. In your report you
17 you refer multiple times to the AH report as
18 something that was commissioned by ATSDR.

19 Were you aware that AH was actually
20 retained by Marine Corps Base Camp Lejeune to do
21 this work?

22 A. I know that by memory that somewhere
23 they say that they were -- on the first page it's
24 written ATSDR support estimation of VOC removal.

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2 Q. I'm sorry which page are you referring
3 to? Page 1-1?

4 A. No, I'm the first the cover page of
5 Exhibit 38.

6 Q. Okay. It says ATSDR support but who
7 paid for the study?

8 A. Oh, I don't know.

9 Q. Who hired AH environmental to do the
10 study?

11 A. I don't know.

12 Q. Doesn't it say in the report that they

13 were hired by Marine Corps Base Camp Lejeune?

14 MS. O'LEARY: Object to form and
15 foundation the next part of the sentence you read
16 said it was to assist ATSDR in obtaining
17 information.

18 MS. BAUGHMAN: I'm going to
19 object. That is a speaking objection. That is a
20 violation of the local rules and the federal rules.
21 I have to ask you not do that again.

22 MS. O'LEARY: I ask you not to
23 misrepresent the record.

24 MS. BAUGHMAN: I am not

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 misrepresenting anything.

3 BY MS. BAUGHMAN:

4 Q. Dr. Hennet who paid AH environmental to
5 do this report?

6 A. I do not who hired them.

7 Q. Okay. Who hired AH environmental?

8 A. I do not know who exactly hired them.

9 Q. Okay. Do you know if AH environmental
10 was in fact a consultant to the Navy and the Marine
11 Corps related to Camp Lejeune related matters?

12 A. Could be.

13 Q. You don't know either way?

14 A. I don't know either way.

15 Q. Okay. So turn please to page 4-2 of the

16 AH report. There is a sentence in the middle of

17 page 4-2 that says.

18 Because of the downstream recarbonation

19 basin at that plant -- and let's back up for a

20 second.

21 There's a recarbonation basin at the

22 Hadnot Point Water Treatment Plant correct?

23 A. Can you repeat I was reading. Sorry.

24 Q. Okay. There is a recarbonation basin at

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 the Hadnot Point Water Treatment Plant correct?

3 A. That's correct.

4 Q. Is there a recarbonation basin at Tarawa

5 Terrace or was there one?

6 A. I don't believe so.

7 Q. Okay. Was there a recarbonation basin

8 or is there one at Holcomb Boulevard Water Treatment

9 Plant?

10 A. I have to refresh my memory on this one.

11 I don't believe so.

12 Q. Okay. So so you see the sentence right
13 above it says.

14 This variability is illustrated in
15 pictures taken at the Hadnot Point Water Treatment
16 Plant.

17 Okay. And then they're talking about a
18 vortex that formed and then the next sentence says.

19 Because of the downstream recarbonation
20 basin at that plant, referring to Hadnot Point, the
21 available head does not appear to allow a fall
22 height of greater than approximately 1 foot and the
23 effluent pipe is likely to be flowing full.

24 Do you see that?

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2 A. I see that.

3 Q. Okay. Were you able to observe at any
4 time that you were at the Hadnot Point Water
5 Treatment Plant the available head given the
6 presence of the recarbonation basin?

7 A. No, but I measured it. I measured the
8 pipe.

9 Q. I'm not talking about the pipe. I'm

10 head refers to the the elevation of the water does
11 it not?

12 A. Well, head refers to a difference of
13 elevation.

14 Q. Okay. Of the water right?

15 A. Yes.

16 Q. Okay.

17 A. For water yes.

18 Q. Okay. When you made your measurement at
19 Hadnot Point of the spiractor there was no water in
20 the spiractor at the time; correct?

21 A. For the February 11 measurements, yes.

22 Q. Okay.

23 A. Not in the one I measured, yes.

24 Q. Okay. Let's back up.

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2 Let's just talk about February 11, 2025.

3 When you made your measurements on that
4 date the spiractor did not have water in it;
5 correct?

6 A. That specific spiractor. You have five
7 of them.

8 Q. Okay. Did you make a measurement at a

9 spiractor that did have water in it on February 11,
10 2025?

11 A. Couldn't be done, no.

12 Q. Okay. So did you at any point in time
13 make a measurement in a spiractor at any Water
14 Treatment Plant at Camp Lejeune that had water in
15 it?

16 A. I did not do measurements when the
17 spiractor was flowing water.

18 Q. Okay.

19 A. I couldn't.

20 Q. So I want to focus on Hadnot Point and
21 the effect of the recarbonation basin on the water
22 level in the spiractor.

23 Do you agree with AH that the head the
24 available head does not appear to allow a fall

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2 height of greater than approximately 1 foot at the
3 spiractor at Hadnot Point?

4 A. I do not agree with that, and I would go
5 back to Figure 3-4 of the AEH report, which is on
6 page 3-10 that you just referred to before. And
7 there you can see where they put where they put the

8 12 inches which is I think is what it is. It
9 appears to be. I didn't measure it.

10 And then you can see there that the fall
11 height is 12 inches. The pipe is not flowing full
12 as claimed. And and I made some estimates of for
13 the flow you have through that pipe and the
14 dimension of 12-inch for the pipe, the 6-inch that
15 they have at the bottom would be -- would be
16 basically the -- where the water level would be in
17 the pipe when it normally flows.

18 Q. Well what's in the diagram on Figure 3-4
19 is not consistent with the text on page 4-2 correct?
20 Because 4-2 says the effluent pipe is likely to be
21 flowing full?

22 A. Right. That's inconsistent.

23 Q. Right.

24 A. And and I would -- I would refer to to

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2 the diagram because for the diagram for the estimate
3 of the 6-inch I made a calculation for the flow and
4 the size of the pipe that basically is a water level
5 would be approximately 6 inches in it. That's what
6 I recall.

7 Q. Okay. You're saying that AH
8 environmental did that correct not you?

9 A. AH environmental did that and on -- on
10 the statement in the -- in the text it's just
11 speculative statement because it is it appears to be
12 and that's based on visual interpretation which
13 which are subjective in that sense.

14 Q. So?

15 A. So that.

16 Q. In your opinion, in your opinion did the
17 downstream recarbonation basin have on the available
18 head in the spiractors at the Hadnot Point Water
19 Treatment Plant?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: Well, it controls
22 the head but but, you know, I measured the pipe and
23 you have 2 feet from the rim of the pipe to the top
24 of the pipe and that's what I did on February 11 and

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2 that's what I did on the previous visit on the pipe
3 that was on the truck. So I did measure those. I
4 did not do a visual evaluation.

5 BY MS. BAUGHMAN:

6 Q. You did not do a visual evaluation of
7 the head in the spiractor of Hadnot Point when it
8 was running at any time; right?

9 A. I did not do measurements when the
10 spiractor was running.

11 Q. Okay. Or and you didn't make a
12 visual -- have you have you actually seen the head
13 the height of the water in the effluent pipe or in
14 the spiractor when it was running at any of the
15 treatment plants?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: No, you cannot see
18 that because it is actually below what you can see.

19 BY MS. BAUGHMAN:

20 Q. Okay. If you look at your what we
21 marked as Exhibit 11 to your prior deposition your
22 notes, you just mentioned something that you
23 measured 2 feet.

24 A. Yeah, well I measured 18 inches and then

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2 and then I relied on the AHE diagram and I agree

3 with a pipe of this kind flowing would have about 6

4 inches at the bottom and that's 18 plus 6 brings you

5 to 24 for a head.

6 Q. Okay. Is the effect of the -- there's
7 no recarbonation basin at Tarawa Terrace right we
8 already talked about that?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: Yeah, yes.

11 BY MS. BAUGHMAN:

12 Q. Okay. But you assumed the same -- the
13 same fall height at Tarawa Terrace and at Hadnot
14 Point right?

15 A. I don't recall what I did for Tarawa
16 Terrace.

17 Q. Well we just talked about it. I mean,
18 we can turn to your report. It's page 5-9.

19 A. (Reviews document.)

20 Q. Of Exhibit 31 and you've assumed for
21 Tarawa Terrace the exact same fall height as you
22 assumed for Hadnot Point; right?

23 A. Yes, and I believe that's a reasonable
24 assumption because the type of spiractors were the

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2 same.

3 Q. Right. But there's no recarbonation

4 basin in Tarawa Terrace there never was?

5 A. There is -- there is no
6 recarbonation -- if I remember correctly there is no
7 recarbonation basin at Tarawa Terrace.

8 Q. Right. So you haven't made any
9 accounting for the fact there was a recarbonation
10 basin at Hadnot Point and not at Tarawa Terrace in
11 your calculation? You've assumed it's the same for
12 both?

13 A. As far as the fall height to the to the
14 effluent pipe, yes.

15 Q. Okay. So the Hadnot Point spiractor is
16 under normal circumstances covered; right? All of
17 them, they have covers on them?

18 A. They have covers on them. I mean,
19 partially opened covers and that is not has always
20 been the case since the start of the plant. That's
21 my understanding.

22 Q. Okay. So is it your testimony that it's
23 not possible to measure the fall height at the
24 Hadnot Point Water Treatment Plant while the

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2 spiractor is operating?

3 A. Not under the conditions that I was
4 there.
5 Q. Okay.
6 A. You would you would need a major project
7 to do that.
8 Q. So you haven't done that?
9 A. I have not done that.
10 Q. Okay. If you look at AH environmental
11 Figure 3-10 which by the way that figure is also in
12 your report; right? You reproduced AH's figure in
13 your report didn't you?
14 A. Yes.
15 Q. That in your report it's on page 5-4 of
16 Exhibit 31. It's exact same diagram; right?
17 A. I believe so, yes.
18 Q. Okay. And I'll let you get there.
19 Okay.
20 So one thing I want to ask you is: That
21 diagram it's Exhibit 2-2 in your report and 3-4 in
22 the AH report, it seems to show like a 90 degree
23 angle. It's showing like it goes down and it goes
24 to the right. Doesn't it. The diagram appears to

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2 show the spiractor has a 90 degree angle.

3 Would you agree?

4 MS. O'LEARY: Object to

5 foundation.

6 THE WITNESS: Yes, and that was

7 the basis of the AEH calculations.

8 BY MS. BAUGHMAN:

9 Q. Right.

10 A. To the schematic for that.

11 Q. But it's not the spiractor pipe. You've

12 observed it. You've taken pictures. The spiractor

13 pipe is not a 90 degree angle is it?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: No, it is more like

16 a J shaped pipe.

17 BY MS. BAUGHMAN:

18 Q. Right.

19 And when we talk about fall height, does

20 that mean like -- that means the vertical distance

21 it's not it's not a diagonal distance for the fall

22 right for a weir?

23 MS. O'LEARY: Object to form.

24 THE WITNESS: It is a vertical

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 distance to the weir right.

3 BY MS. BAUGHMAN:

4 Q. Right when we refer to fall height we're
5 referring to the vertical fall correct top to
6 bottom?

7 A. Yes, that's that would be a fall height
8 for a weir yes.

9 Q. Okay. And the calculation that both you
10 and AH used for the spiractor volatilization is a
11 calculation regarding a weir right? It's assuming
12 that this acts as a weir?

13 A. Yes, that's what AEH did and I just use
14 the same approach.

15 Q. Okay. Can you turn to Exhibit 39 and
16 just to be -- let's just establish first. Exhibit
17 39 these are the photos taken -- well they're all
18 marked. February 11, 2025.

19 Do you see that? They all have that
20 marking on them with the date?

21 A. I see that.

22 Q. Okay. So these are from your visit to
23 the Camp Lejeune site on February 11, 2025 that's
24 what Exhibit 39 is; right?

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2 MS. O'LEARY: Object to
3 foundation.

4 THE WITNESS: Not all pictures
5 have dates on it but I think you're correct. This
6 is what I recall.

7 BY MS. BAUGHMAN:

8 Q. Okay. And if you could turn to page 28
9 of Exhibit 39.

10 What are we looking at there?

11 A. Hold on. Hold on.

12 Okay.

13 Q. What is what is this a picture of Hennet
14 USA 28 in Exhibit 39?

15 A. This is a photograph taken from the
16 opening from the covers that is on top of the
17 spiractors that was not in use, that means it had no
18 water in it, and that is, you have the spiractor
19 pipe as you can see the G -- the J shaped pipe.
20 It's kind of laying down. And then you have -- you
21 have a scale that was just basically put against the
22 pipe the best we could and a picture was taken of
23 that.

24 Q. Okay. So Exhibit -- I'm sorry. Page 28

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2 of Exhibit 39 this is a spiractor a pipe in the
3 spiractor at Hadnot Point Water Treatment Plant;
4 right?

5 A. That's a pipe where I conducted
6 measurements, yes.

7 Q. Right. Hadnot Point Water Treatment
8 Plant; right?

9 A. Hadnot Point Water Treatment Plant.

10 Q. Okay. On February 11, 2025; right?

11 A. Correct.

12 Q. Okay. And that what we see there that
13 is a measuring tape trying to measure the the fall
14 height right?

15 A. No. The measuring tape is there to kind
16 of give the best you can a reliable scale against
17 the pipe.

18 Q. Okay. And from page 28 of Exhibit 39 we
19 can see that this is the J shape as you call it
20 pipe. It is not a 90 degree angle correct?

21 A. It is a J shaped pipe correct.

22 Q. Okay. And if we were talking about what
23 is the fall height, it would be from the top of the

24 rim of that pipe going straight down; right? That's

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2 the fall height?

3 A. That would be the fall height for the
4 calculations or the fall height for the weir, yes.

5 Q. Okay. And if you look at your measuring
6 tape, doesn't it look like the fall height there is
7 about 13 or 14 inches?

8 MS. O'LEARY: Object to form and
9 foundation.

10 THE WITNESS: No, that's a visual
11 effect. Because -- that's the best we could do but
12 that's a visual effect because you don't go -- the
13 picture is not -- provides a visual effect because
14 you don't have the tape all against the pipe. It is
15 distorted. So.

16 BY MS. BAUGHMAN:

17 Q. How is it distorted?

18 A. The visual effect is distorted. And,
19 you know, we measured that differently. You don't
20 only have this this is only one picture that was
21 taken of that attempt there.

22 Q. Well it looks like it's based on this

23 picture it looks like that vertical distance is 13
24 inches doesn't?

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2 MS. O'LEARY: Object to form and
3 foundation.

4 THE WITNESS: No. Whatever you
5 want the picture to say it looks like. You have to
6 understand that it's -- it is basically distorted
7 photograph. It's not good enough for measurement.
8 And we did all the measurements to kind of get at
9 that.

10 BY MS. BAUGHMAN:

11 Q. Which picture in Exhibit 39 demonstrates
12 the fall height that you measured?

13 MS. O'LEARY: Object to
14 foundation.

15 THE WITNESS: Well, I do not -- I
16 cannot answer that but it seems that you may not
17 have all the pictures that I took here. I don't
18 know. I don't know. I cannot verify that. It
19 seems that you cherry-picked one.

20 BY MS. BAUGHMAN:

21 Q. Dr. Hennet I did not cherry-pick

22 anything. I have provided you with every a picture
23 of every photograph that was provided to us from
24 February 11, 2025 okay? So don't accuse me of that

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2 okay? This is everything that the DOJ produced.

3 So can you show me which photograph in
4 Exhibit 20 -- 39 demonstrates in your opinion the
5 fall height?

6 MS. O'LEARY: Object to form and
7 foundation.

8 THE WITNESS: Yes, and give me a
9 minute. Okay.

10 (Reviews document.)

11 Okay. I would go to a series of
12 pictures for this and let's say you have Bates
13 number that ends with 008. That one is a
14 measurement of the -- of the diameter of the
15 effluent pipe. That's a measurement because that
16 one is not distorted because the tape is touching
17 one end of the pipe and coming all the way to
18 the -- to the other end and I think that that was
19 something like.

20 BY MS. BAUGHMAN:

21 Q. Okay. But 008 does not give us?
22 A. Okay.
23 Q. A measurement of the fall height does
24 it?

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 MS. O'LEARY: Object to form.
3 THE WITNESS: I am going there.
4 BY MS. BAUGHMAN:
5 Q. I am just asking you that question?
6 A. It doesn't it doesn't.
7 Q. It does not?
8 A. No.
9 Q. Okay.
10 A. Okay. Now you have 009. Here you have
11 a distance that is measured from a bar a horizontal
12 metal bar using the rope to basically get the
13 distance from the top of the pipe to the bar. So
14 that's a distance that is will relevant for getting
15 the fall height.
16 Q. Okay. So when we look at page at page 9
17 how can we tell what that measurement is from the
18 picture?
19 A. Well, you have several steps in. That

20 that measurement with the rope is actually taken
21 with a tape outside of the -- of the opening of the
22 spiractor because you could not do it right there.

23 Q. Okay. So there's no way by looking at
24 picture 9 on Exhibit 39 we could make that

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2 measurement correct not by looking at the photo?

3 A. Hold on. Hold on.

4 Q. Just answer that question?

5 MS. O'LEARY: No object to form.

6 BY MS. BAUGHMAN:

7 Q. No I'm asking Dr. Hennet you just
8 brought up page 9. Is there a way with the photo on
9 page 9 to make a measurement?

10 MS. O'LEARY: Object to form and
11 foundation.

12 THE WITNESS: The measurement is
13 done and illustrated in an additional photographs
14 where the lengths of the rope is being measured with
15 a tape.

16 BY MS. BAUGHMAN:

17 Q. Okay. Show me where that is.

18 A. I am looking for it.

19 (Reviews document.)

20 Okay. That will be photograph 003.

21 Q. Okay. It's a measurement of a rope but
22 we don't know, we can't tell from the measurement
23 where the rope was right?

24 A. Well, I am telling you where the rope

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2 was by showing you 009. That's basically is the way
3 we had to do it.

4 Q. Okay. So you're saying that that from
5 that what we're seeing there is from that pipe on 9
6 all the way to where? To what part of the bottom of
7 the spiractor?

8 A. Not to the.

9 Q. To?

10 A. It is to the top of the pipe of the
11 spiractor. Just after it stops turning is a J.

12 Q. Just after it stops turning is a J. So
13 it's -- I tell you what we'll do.

14 I'm going to mark as Exhibit 41 a copy
15 just of page 9.

16 (Document marked for
17 identification as Exhibit 41.)

18 BY MS. BAUGHMAN:

19 Q. And I'm going to give you a pen and I
20 want you to show me from right on Exhibit 9 where
21 the rope was that you measured. Just draw the rope.

22 A. The rope is here. (Marks document).

23 Q. Okay. Can I see that please?

24 A. (Hands document).

↑

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2 Q. So if you look at Exhibit 11?

3 A. Exhibit 11.

4 Q. In your diagram there, you're showing 18
5 inches from where to where? Don't write on this yet
6 on Exhibit 41 but show me where that 18 inches would
7 be.

8 A. Well, it would be from the rim elevation
9 down. That would be this portion. Because then we
10 measure this distance on another photographs but we
11 measured that distance from there to the rim and
12 then you just subtract that from the length of the
13 rope and then you have the distance from the rim to
14 the top of the pipe and that's 18 inches. About and
15 I made a note that it was difficult to measure. So
16 it's.

17 Q. Okay.

18 A. It is an estimate.

19 Q. So?

20 A. Plus or minus an inch or so.

21 Q. Okay. So use the pen here and go ahead

22 and like mark where the 18 inches and write 18

23 inches so we can see what you're talking about?

24 MS. O'LEARY: Object to form.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 BY MS. BAUGHMAN:

3 Q. Go ahead?

4 A. Again just asking me to do something

5 just the accuracy of it you can always talk about.

6 But you have to you have to -- it's -- we measured

7 this distance here. (Marks document).

8 Q. But I'm looking at your diagram?

9 A. And then.

10 Q. On Exhibit 11 and you're saying 18

11 inches based on this work. So I'm trying to

12 understand where that 18 inches is?

13 A. And I'm trying to explain that to you.

14 Q. Okay. Well can you show us?

15 A. Well, I can show you. This is one

16 measurement right?

17 Q. You have to say what this is?

18 A. That's.

19 Q. For the record when you say this is one
20 measurement what are you referring to what's the
21 number of that photo?

22 A. This is sorry yes. It is 003 okay.

23 Q. All right?

24 A. This is one measurement that's total

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2 length of that hole that you have here.

3 Q. Okay.

4 A. Vertically.

5 Q. So the line that you've drawn on what
6 we've marked as Exhibit 41 is the measurement on
7 page -- on the photo number 3 right?

8 A. Yes.

9 Q. Okay. Now where's the 18 inches that
10 you're you're indicating on Exhibit 11 exists? What
11 what is that?

12 A. The next step is this one. It's Exhibit
13 012.

14 Q. Okay. And that's showing 11 inches?

15 A. From the top of the bar which is always
16 on top to the rim.
17 Q. Right.
18 A. All right. So that would be this here.
19 Q. Right.
20 A. Right? And then on 003 you can see that
21 to the top of the bar it's about 28 inches. The
22 lengths of the rope right?
23 Q. Right.
24 A. Then here you have this 11 right?

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 Q. Right.
3 A. And and you have basically 28 minus 11.
4 That's 17 but, you know, that it's -- it's
5 approximate. So this is -- this is where the 18
6 comes from. That this -- this is 012 that give you
7 the 11, 11 inches from the top of the bar to the rim
8 right?
9 Q. Uh-huh.
10 A. And then you have this that gives you
11 the entirety of the from the top of the bar to
12 basically the top of the pipe.
13 Q. Right.

14 A. And that's about 28 inches.

15 Q. Uh-huh.

16 A. So you subtract 11 from the 28 inches
17 and that that gives you -- it will be 17. But.

18 Q. Okay. Can you show me? Go ahead and
19 mark it on the diagram there the 18 or 17 inches.
20 Show us where that is.

21 MS. O'LEARY: Object to form.

22 THE WITNESS: It's difficult on
23 that.

24 You have the 11 here and you have

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 the 28 there.

3 BY MS. BAUGHMAN:

4 Q. Right. But on Exhibit 41 where is the
5 18 inches?

6 A. Exhibit 41.

7 MS. O'LEARY: Objection.

8 BY MS. BAUGHMAN:

9 Q. This one?

10 A. On this photograph on 009.

11 Q. Right.

12 A. Well, it's going to be somewhere. You

13 have to subtract.

14 Q. Right. Just mark it so that so that so
15 that the court will understand what you're saying?

16 MS. O'LEARY: Object to form. He
17 just said it's hard to see on that photo.

18 BY MS. BAUGHMAN:

19 Q. That's the photo you showed me that was
20 the best illustration of your measurements right?

21 MS. O'LEARY: Object to
22 foundation.

23 THE WITNESS: It's a step wise
24 approach. You need more than one thing to

↑

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2 illustrate the the measurements that I took. You
3 have this one which gives you 28 inches right? This
4 is this.

5 BY MS. BAUGHMAN:

6 Q. I understand.

7 A. You have this one. By this one I meant
8 003.

9 And then you have 012 that give you 11
10 inches.

11 And then you have this one that shows

12 you that these lengths minus -- the lengths that is
13 on 003 minus the lengths that is on 012.

14 Q. Okay.

15 A. Gives you basically the distance between
16 the rim and the top of the pipe.

17 Q. Okay. So?

18 A. The top of the pipe.

19 Q. Mark the distance from the rim to the
20 top of the pipe on there?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: I don't know how to
23 do.

24 MS. BAUGHMAN: Are you instructing

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2 him not to do it.

3 MS. O'LEARY: No I'm objecting to
4 the form but I'm not instructing him not to.

5 BY MS. BAUGHMAN:

6 Q. Go ahead?

7 A. It is difficult to do here because if I
8 do something on this you are going to make something
9 of it that I didn't mean it to be. And that's.

10 Q. Do this for me. Where is the fall? If

11 you were measuring the fall height if you could
12 measure the fall height?

13 A. Okay.

14 Q. Without this experiment what is the fall
15 height from where to where on this document?

16 A. We are not at the fall height yet we are
17 at the distance from the rim to the top of the pipe.

18 Q. Okay. I'm asking you a different
19 question now.

20 Where is the fall height?

21 A. The fall height would be to where the
22 level would be in this 12-inch pipe or in this pipe
23 as estimated by AHE -- AEH and that's about 6 inches
24 of here. So that would be something from -- again

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2 on this photograph it's difficult to do because you
3 have a -- you have a visual this.

4 Q. Let me ask you.

5 Where is the fall height? I understand
6 people can't see what I'm doing. I'm just.

7 Wouldn't the fall height be from this
8 rim to where the water level is? Isn't that the
9 fall height or not?

10 MS. O'LEARY: Object to form.

11 THE WITNESS: That would be from
12 from this this rim to basically, yeah, something
13 like this.

14 BY MS. BAUGHMAN:

15 Q. Can you draw for me if you are able to
16 whether you measured it or not what the fall height
17 is so we understand what that is?

18 MS. O'LEARY: Object to form.

19 THE WITNESS: I gave you that on
20 my notes and I'm telling you that the basis for that
21 is this here. Drawing on photographs that are
22 distorted like this is not something that's
23 scientific.

24 BY MS. BAUGHMAN:

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Q. Well these are those are photos that you
3 took; right? Or you directed to be taken at your
4 site visit?

5 A. Those are photographs and the
6 measurements are on 003, 012, and then you have the
7 6-inch water level from AEH in the pipe and the
8 dimension of the pipe is basically 12-inch

9 approximately.

10 Q. Okay. So are you refusing to draw the
11 fall height on Exhibit 41 your picture marked number
12 9? You won't do it?

13 MS. O'LEARY: Object to form.

14 THE WITNESS: It's described in
15 my report and the fall height, the fall height is
16 from the rim to the water level in the pipe when
17 it's operating.

18 BY MS. BAUGHMAN:

19 Q. Okay. But you don't want to draw it?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: I don't feel
22 comfortable to draw it on a picture that is
23 distortion.

24 BY MS. BAUGHMAN:

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2 Q. Okay. And why and what -- why is
3 Exhibit 9 distorted? What's distorted about it?

4 A. Because it is a photograph of something
5 that is actively that is 3 dimensions and the
6 photograph itself is, you know, one dimension.
7 Things are distortions. That's what happens.

8 That's why you can -- it is very difficult to do
9 visual evaluation if you don't do measurement
10 because the distortion just leads you to -- to
11 estimates that are not correct.

12 Q. And how do you know -- when you did when
13 you dropped the rope down how do you know that the
14 rope was straight? Could you see the rope?

15 A. Yes, I did see the rope.

16 Q. Okay.

17 A. And it was straight.

18 Q. Do you have a picture of the rope
19 hanging down when you made the measurement?

20 MS. O'LEARY: Object to
21 foundation.

22 THE WITNESS: It is on 003.

23 BY MS. BAUGHMAN:

24 Q. No no no. I mean when you dropped the

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2 rope down right to figure out the length there, do
3 you have a picture of you when you did that?

4 MS. O'LEARY: What's exhibit
5 number you're pointing to.

6 BY MS. BAUGHMAN:

7 Q. Number 1?

8 A. Right. It is on 009.

9 Q. The rope is -- no, you drew the rope on

10 009?

11 A. No, this is on on 009. This is a

12 different one. You go to Exhibit 40 and this is 009

13 on Exhibit 40. There I did not draw anything on 009

14 in Exhibit 40. You made me draw something on

15 Exhibit 41.

16 Q. Hold on.

17 A. And what you can see there is a rope.

18 Q. But those are the same picture.

19 A. They are the same pictures but there you

20 made me draw on it.

21 Q. Okay. Did you just draw on top of what

22 the rope of where the rope was?

23 A. That's what you asked me to do.

24 Q. Okay. All right. Okay.

↑

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2 And is there any kind of a -- there's no

3 measurement or scale on Hennet USA 9 that would

4 allow us to measure that rope distance correct

5 independent of what you-all did?

6 A. You don't have -- I couldn't put a scale
7 on there. Otherwise I would have done it.

8 Q. Okay. Okay. And other than the diagram
9 that's drawn on Figure 3-4 of AH do you have any
10 other basis to disagree with the statement in the AH
11 report that the effluent pipe is likely to be
12 flowing full in the Hadnot Point Water Treatment
13 Plant spiractors?

14 MS. O'LEARY: Object to
15 foundation.

16 THE WITNESS: In the AEH's report
17 somewhere in there it just says that I made
18 calculations for the condition of the pipe using a
19 dimension of 12 inches for the pipe and at the flow
20 rate that comes out of the spiractors I estimated
21 that the depths of water in the pipe is 6 inches.

22 BY MS. BAUGHMAN:

23 Q. And where is that calculation in your
24 report? Is that in your report?

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2 A. I -- I just -- I just used the AEH
3 diagrams that I put in my report and it is there.

4 Q. I know the calculation is in your

5 report?

6 A. The calculation for for what?

7 Q. For for you just said you did a
8 calculation to see whether the level of water in the
9 pipe would be 6 inches based on the the amount of
10 water going through the spiractor or through the
11 Water Treatment Plant.

12 I was just wondering if is that
13 calculation in your report?

14 A. I didn't do that calculation.

15 MS. O'LEARY: Object to form.

16 THE WITNESS: The EA -- AEH did
17 that calculations and it is a reasonable answer.

18 BY MS. BAUGHMAN:

19 Q. I want to ask you something else about
20 the AH report while we're here. If you could turn
21 to pages 3 -- page 3-8 first of the AH report
22 Exhibit 38.

23 A. Yes.

24 Q. And there is a picture of the Hadnot

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2 Point Water Treatment Plant spiractor effluent pipe

3 and it's labeled 1941/1942 do you have any reason to

4 believe that the date of that photograph is not
5 correct?

6 MS. O'LEARY: Object to
7 foundation.

8 THE WITNESS: I have no
9 understanding of the source of the photographs and
10 it's not described. So this is -- this is -- this
11 is what it is.

12 BY MS. BAUGHMAN:

13 Q. Right. But do you have some reason to
14 believe that the date is incorrect as stated by AH
15 in its report?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: With the exceptions
18 is I don't see where it comes from. So whether it
19 is even -- I have no -- I have no information that
20 would -- that would basic tell me where that picture
21 actually comes.

22 BY MS. BAUGHMAN:

23 Q. Right.

24 A. Besides what is written under it.

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2 Q. Right.

3 A. And that's what it is.

4 Q. Okay. So the next page on page 3-9 they
5 have a spiractor effluent pipe for Hadnot Point
6 labeled 1944 and 1945.

7 Do you have a basis to believe that that
8 date is incorrect?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: Same thing. I have
11 no way to verify if this is from there and if it is
12 from that date. I -- I don't know but.

13 BY MS. BAUGHMAN:

14 Q. But do you have -- what I'm asking is do
15 you have information that leads you to believe
16 that's the wrong date?

17 A. I have no information to verify this.
18 None.

19 Q. Either way?

20 A. Either way.

21 Q. Okay. Okay. Okay. I want to ask you
22 some questions about the water buffaloes and while
23 we're while we've got Exhibit 39 handy the pictures
24 from February 11th let me ask you a few questions

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2 about those photos.

3 If you turn to page 89, what is that a
4 picture of?

5 A. This is a photograph of a station
6 basically where water buffalos can be filled up at
7 the base.

8 Q. Okay. And are they filled up through
9 that through that red hose?

10 A. Yes.

11 Q. Okay. Is there any reason that when the
12 water buffalos are filled up the Marines can't just
13 put the hose right into the tank instead of holding
14 it above the tank?

15 A. Well, they have to hold it because with
16 the pressure that goes through that pipe it will
17 just leave the water.

18 Q. I see but is there any reason they can't
19 put it inside the water buffalo to fill it up
20 instead of holding it above the water buffalo?

21 A. Well, when I observed it the way I did
22 it is I kept the hose on top of the.

23 Q. Right.

24 A. On top of the water.

↑

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2 Q. So your observation was in February of
3 2025 correct?

4 A. That's my observation.

5 Q. All right.

6 A. Yes.

7 Q. Did you have any conversations with any
8 Marines about what the normal protocol is to fill a
9 water buffalo?

10 A. They told me that. So I did it. I
11 didn't instruct them to do it in any way.

12 Q. So you did have a conversation with the
13 Marine?

14 A. No, I did not have a conversation with
15 the Marine themselves. I just came up with the with
16 the water buffalo and I just climbed on it to be
17 able to take pictures and then they they say -- I
18 just told them, fill it up.

19 Q. Okay.

20 A. I mean do it and that's it.

21 Q. So that's?

22 A. That's all. That's all my conversation
23 with them. That's it.

24 Q. Got it. Okay.

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2 Have you had any conversation with any
3 other individual regarding how water buffalos were
4 filled up at Camp Lejeune?

5 A. I have not had conversation about that
6 because but there is information in that in the
7 historian report that shows how it should be done
8 and so on.

9 Q. Okay.

10 A. And how it was done over time.

11 Q. Okay. You're referring to the DOJ's
12 experts historian experts report correct?

13 A. Yes.

14 Q. Okay. Have you yourself done any
15 investigation independent of the historian on how
16 water buffalos were filled up at Camp Lejeune other
17 than watching this one be filled up in 2025?

18 A. Well, yes, I looked for information that
19 describes, you know, the geometry of the water
20 buffalos what that way and I found what I found and
21 based on that I just -- I just understood that for
22 the water buffalos that I found information on the
23 dimensions of they were filled up through the
24 filling hole by connecting the hose to the filling

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2 hole that there's a strainer to it. That's that's
3 what I recall. I think it is in my report the
4 diagram of the water buffalos and that's what I
5 relied upon to say this is the way a water buffalos
6 was filled up.

7 Q. Okay. So other than looking at the
8 dimensions of water buffalos did you do anything
9 else to investigate how water buffalos were filled
10 at Camp Lejeune? Let me strike that and start over.

11 Other than watching one water buffalo be
12 filled up in 2025 and reviewing the dimensions of
13 water buffalos did you do anything else to
14 investigate how water buffalos are filled up?

15 MS. O'LEARY: Objection and
16 foundation.

17 BY MS. BAUGHMAN:

18 Q. Your investigation not the historian?

19 MS. O'LEARY: Object to form and
20 foundation.

21 THE WITNESS: I relied on
22 the -- I both the information that historian had put
23 together which is more than I had found on water

24 buffalos and you know, the protocol of filling it

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2 and everything over time.

3 BY MS. BAUGHMAN:

4 Q. Okay. I'm just trying to get the
5 universe for what you're relying for how water
6 buffalos are filled up PR of so we know you're
7 relying on the historian the DOJ historian?

8 A. Uh-huh.

9 Q. We know you're relying on watching one
10 water buffalo be filled up in February 2025 and we
11 know you're relying on the dimensions of the water
12 buffalo.

13 Is there anything else you're relying
14 on?

15 MS. O'LEARY: Object to
16 foundation.

17 BY MS. BAUGHMAN:

18 Q. For how water buffalos were filled up at
19 Camp Lejeune?

20 MS. O'LEARY: Same objection.

21 THE WITNESS: Well, you know, that
22 I mention so are in my report right. I -- in an

23 appendix of my report you have water buffalos with
24 the dimensions marked on them.

↑

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2 BY MS. BAUGHMAN:

3 Q. That's one of the three things I
4 mentioned.

5 Is there anything else?

6 A. Well, I have also, you know, I have seen
7 all of a sudden after my report two affidavits by
8 people who apparently witnessed one of the buffalos
9 being filled.

10 Q. Okay. There's that. Anything else?

11 A. And that was new to me.

12 Q. I understand.

13 A. That was major reason why I went back to
14 kind of look at that.

15 Q. Right. Anything else?

16 A. That's all I can think about right now.

17 Q. Okay. So do you have any information
18 that leads you to believe that when Marines filled
19 up water buffalos at Camp Lejeune they did not put
20 the hose inside the water buffalo to fill it up?

21 MS. O'LEARY: Object to

22 foundation.

23 THE WITNESS: And I have seen
24 descriptions that you would hook up the hose to the

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 filling hole the filling port that is a strainer. I
3 have seen that. And then I have seen the
4 information that some water buffalos were filled up
5 through the manhole and that came with those
6 affidavits that came after my report and that and
7 also in Dr. Sabitini's rebuttal report to my report
8 it is the water buffalos are sometimes filled up
9 through the manhole and that was the reason why I
10 just wanted to see how do I do it today and that's
11 what I did.

12 BY MS. BAUGHMAN:

13 Q. I'm going to respectfully object as
14 nonresponsive and maybe you don't understand my
15 question so I'm going to try it again.

16 When you okay. Let me just ask you let
17 me back up.

18 You watched one water buffalo be filled
19 up in February 2025 right?

20 A. That's right.

21 Q. Okay. Before that had you yourself ever
22 seen a water buffalo be filled up?

23 A. Not before that.

24 Q. Okay.

↑

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2 A. Hold on. Except on a video that
3 Dr. Sabatini put in his report.

4 Q. Okay. So when you wrote your report in
5 December of 2024 you had never seen a water buffalo
6 be filled up correct?

7 A. No, the only information I had was what
8 I have in my report and information in the historian
9 report.

10 Q. Right. So that means when you signed
11 your report on December 9, 2024 you had never seen a
12 water buffalo be filled up correct?

13 A. Personally I have never seen.

14 Q. Okay.

15 A. I had never seen a water buffalo being
16 filled up.

17 Q. Okay.

18 A. By then.

19 Q. So it's possible to fill a water buffalo

20 by taking that red hose and putting it inside the
21 tank to fill it up right?

22 A. Everything is possible.

23 Q. Okay. What's your basis to say that was
24 never done?

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2 MS. O'LEARY: Object to
3 foundation.

4 THE WITNESS: Maybe it was done
5 maybe it was not but it was also done through the
6 through the port the filling port. That's
7 documented and it was also done as I observed it and
8 it was also done as Dr. Sabatini attachment to his
9 report which is a YouTube video of the filling up of
10 the water buffalo. That's and in that case I did it
11 basically the same ways and I observed.

12 BY MS. BAUGHMAN:

13 Q. All right. So you have not done any
14 calculations regarding the amount of volatilization
15 that occurs during the filling of a water buffalo
16 through a manhole cover right?

17 A. No. I have observed it and I have seen
18 the extensive aeration that occurs and I have

19 basically concluded that it's similar as far as the
20 losses are concerned than the calculated losses that
21 I have in my report.

22 Q. Okay.

23 A. That where the water buffalo was filled
24 up through a strainer.

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2 Q. I'll object as nonresponsive.

3 I just want to know. Have you done a
4 calculation? Have you done a calculation on the
5 amount of volatilization that occurs when you fill a
6 water buffalo through a manhole cover?

7 A. I have not done.

8 MS. O'LEARY: Object to form.

9 THE WITNESS: Sorry. I have not
10 done additional calculations to from what is in my
11 report because I consider that it was similar.

12 BY MS. BAUGHMAN:

13 Q. Okay. And in your report you don't have
14 a calculation on the volt the amount of
15 volatilization from filling a water buffalo through
16 the manhole cover right?

17 A. I have it through a calculations through

18 the strainer in my report.

19 Q. Not through the manhole cover?

20 A. Not through the manhole cover.

21 Q. Okay.

22 A. And then what I observed led me to
23 conclude that it was pretty similar.

24 Q. Okay. I'll object as nonresponsive to

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2 everything after not through the manhole cover.

3 When you observed that one water buffalo
4 being filled in February 2025 did you make any
5 measurements related to volatilization?

6 A. I didn't do measurements but I did
7 observations.

8 Q. Okay. And this may be obvious but I
9 just I just want to ask you.

10 So when we're talking about the
11 contaminants that that were in the water at Camp
12 Lejeune, PCE, TCE, the other VOCs, if they're
13 volatilizing out of the water right you couldn't see
14 them right?

15 A. I couldn't see them but I could smell
16 the chlorine which is also volatile organic compound

17 and when you do that I could smell the chlorine
18 coming out.

19 Q. Okay. And you can't see the chlorine
20 either right?

21 A. You cannot see it but.

22 Q. Okay.

23 A. I could I could smell it and then that's
24 why you go to geochemistry to estimate the

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2 partitioning.

3 Q. Okay. So did you do a calculation on
4 how much VOCs would come out of the water when you
5 fill I an a water buffalo based our chlorine
6 smelling?

7 A. Not based on that. That's an
8 observation.

9 Q. Okay.

10 A. I didn't do on a calculation on it.

11 Q. Okay.

12 A. It's an observation.

13 Q. Did you make any measurement on how much
14 chlorine was coming out of the water when the water
15 buffalo was being filled?

16 A. I did not measure that. I didn't have
17 the what would have been needed to do that, no.

18 Q. Okay.

19 A. And also I would like to take a break at
20 some point.

21 Q. We can take a break right now. That's
22 fine. Going off the record?

23 THE VIDEOGRAPHER: Time is 11:31
24 AM. We're now off the record.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 (A recess was taken.)

3 THE VIDEOGRAPHER: The time is
4 11:42 AM. We are now on the record.

5 BY MS. BAUGHMAN:

6 Q. All right. Dr. Hennes I want to ask you
7 a few more questions about Exhibit 40 which are the
8 pictures from a prior visit of yours before 2025 to
9 the Camp Lejeune.

10 Have you got that in front of you?

11 A. Yes, I do.

12 Q. Okay. Can you tell me the one that's
13 page 3 we're looking at CLJA photos SSPA number 3.

14 What's that a picture of?

15 A. This is a picture of the top of the best
16 I can recall the top of a spiractor.
17 Q. Do you know at which plant?
18 A. I think this one would have been Hadnot
19 Point.
20 Q. Okay. And can you -- is it possible to
21 measure the fall height based on this picture?
22 A. You cannot access it, no.
23 Q. Okay.
24 A. You cannot see it either.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 Q. It looks like from the picture it looks
3 like the water is full all the way to the top.
4 Is that true?
5 MS. O'LEARY: Object to
6 foundation.
7 THE WITNESS: No, I don't think
8 so.
9 BY MS. BAUGHMAN:
10 Q. Okay. If you turn to page 7 of Exhibit
11 40, what's that a picture of?
12 A. That's a picture of a water buffalo.
13 Q. And we're talking a little bit earlier

14 about how in your report your December 2024 report
15 we've marked as Exhibit 31 you did calculations
16 assuming there was a filler pipe with a strainer
17 right and that's how it was filled through that
18 filler pipe with a strainer right?

19 A. That's correct.

20 Q. Is there a flow pipe with a strainer on
21 the water buffalo picture in page on page 7 of
22 Exhibit 40?

23 A. Not not on this one.

24 Q. Okay. So you you observed some water

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 buffalos even if you didn't see them filled in your
3 prior visit to Camp Lejeune; correct? Before 2025?

4 A. Yes, parked.

5 Q. Did you look for the the filler pipe
6 with the strainer while you were there?

7 A. This one didn't have one. So.

8 Q. Okay. So you knew that some water
9 buffalos didn't have that?

10 A. In 2024 I knew that yes.

11 Q. Okay. Did you do an investigation to
12 see during what years the water buffalos had a

13 filler pipe with a strainer?

14 A. Outside of what I mentioned before, you
15 know, which is the historian report as well as the
16 schematics of water buffalos historically. I have
17 nothing else.

18 Q. Okay.

19 A. But in '24 this one that I saw had
20 no -- no filler pipe.

21 Q. Okay. If you look at page 12, that's
22 the picture of a spiractor that was sitting on a
23 truck bed; is that right?

24 A. Yes.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Q. And that was found near the Holcomb
3 Boulevard Water Treatment Plant?

4 A. I think it was it was on a truck bed
5 parked next to the Holcomb boulevard.

6 Q. Okay.

7 A. I believe so yeah.

8 Q. All right. So if you turn to picture 20
9 of Exhibit 40, is that another picture of a water
10 buffalo?

11 A. That's correct.

12 Q. And again there's no filler pipe with a
13 strainer on this one?

14 A. Yeah, again 2024 water buffalo.

15 Q. Okay.

16 A. I took a picture of it.

17 Q. Okay.

18 A. I mean, I had a picture of it taken.

19 Q. Then if you turn to page 25, is
20 that -- is that that the same spiractor that was
21 sitting on the truck bed near the Holcomb boulevard
22 Water Treatment Plant?

23 A. Yes.

24 Q. Okay. And you used you're your card

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 there your Metro card as a scale?

3 A. That's not mine but...

4 Q. That's what was used for the scaling?

5 A. That's what was used for the scaling
6 yes.

7 Q. All right. So again we turn to page 39.
8 It's another picture of a water buffalo; right?

9 A. It's a picture of a water buffalo. I
10 don't know if it's the same one or not. I don't

11 know but.

12 Q. Okay.

13 A. It is yes.

14 Q. Again there's no filler pipe with a
15 strainer on that one right?

16 A. No, that's again 2024. This is what I
17 saw.

18 Q. Okay. And then picture 42. This is
19 similar to a picture we saw from your 2025 visit.

20 This is where the Marines would fill up
21 the water buffalos?

22 A. Yes.

23 Q. Okay. All right. When you were writing
24 your report your December 2024 report did you review

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 the technical manuals that came with the water
3 buffalos that explained how the water buffalos
4 should be filled up?

5 MS. O'LEARY: Object to
6 foundation.

7 THE WITNESS: I don't recollect
8 that. You have to show me that.

9 BY MS. BAUGHMAN:

10 Q. Were you aware when you wrote your
11 report in December 2024 that some water buffalos
12 during the time frame of the 1950s through 1986 in
13 fact did not come with the filler pipe with a
14 strainer? Did you know that?

15 A. I didn't know that then.

16 Q. Okay.

17 A. With the exception of what was in the
18 historian report and I don't recollect the details
19 of that.

20 Q. Okay. I want to ask you some -- if we
21 could turn to your report Exhibit 31. Turn to a
22 different subject here. If we could turn to page
23 529. Are you there? Okay.

24 So you've opined that there was a what

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 you call a long time average TCE concentration of
3 227 micrograms per liter for water supplied by the
4 Hadnot Point Water Treatment Plant right?

5 A. You have to show me where it says that.

6 Q. Sure. The first paragraph under your
7 exhibit on page 529. Look at that last sentence.

8 You say.

9 Considering that Hadnot Point or HP651
10 was being pumped 39 percent of the time yields a TCE
11 long time average concentration of 227 micrograms
12 per liter for Hadnot Point Water Treatment Plant
13 supplied water.

14 Do you see that?

15 A. Yes, I do.

16 Q. Okay. And this so your calculation of
17 227 micrograms per liter for the long time average
18 is based on the 39 percent right the Hadnot Point
19 water -- 651 was being pumped 39 percent of the time
20 correct?

21 A. Yes.

22 Q. And also based on your calculation of an
23 average concentration for TCE in Hadnot Point Water
24 Treatment Plant from January 21, 1985 to February 5,

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 1985 of 582 micrograms per liter right?

3 A. Yes.

4 Q. Okay. And in case you didn't you seem
5 hesitant. Look at the first sentence of that
6 paragraph. You wrote.

7 The average concentration measured for

8 TCE at Hadnot Point Water Treatment Plant for the
9 period January 21 through February 5, 1985 is 582
10 micrograms per liter.

11 Do you see that?

12 A. Yes, I do.

13 Q. So to get to the 227 for the long time
14 average you had two inputs to that calculation, the
15 39 percent and the 582; right?

16 A. Yes.

17 Q. Okay. So I want to ask you first about
18 the calculation of the average concentration for TCE
19 at the Hadnot Point Water Treatment Plant of 582.
20 Okay? I want to talk about how you reached that
21 number. Okay?

22 So first let's let's look at page 523 of
23 your report.

24 A. Yes.

↑

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2 Q. Okay. And in the paragraph at the top
3 of the page in the middle you refer to these 18
4 water samples; right? You see that in the middle of
5 that paragraph you say.

6 18 water samples were collected from

7 locations in the two distribution systems.

8 Okay? And that's referring to this time
9 frame when the Hadnot Point Water Treatment Plant
10 was supplying water to Holcomb Boulevard; correct?
11 That January 27 to February 5, '85 time frame right?

12 A. I think that's correct.

13 Q. Okay. Look at the sentence right
14 before.

15 During that period of time right
16 referring to January 27 to February 5th, '85, HPWTP
17 the Hadnot Point Water Treatment Plant supplied the
18 entirety of the water in the Holcomb Boulevard
19 system which was shut down following a fuel release
20 incident.

21 Do you see that?

22 A. Yes.

23 Q. So during this time frame these 18 water
24 samples were collected from the two distribution

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 systems and then you say.

3 The average TCE concentration in the
4 treated water was 582.

5 Right?

6 A. Yes, that's what I say.

7 Q. Okay. So look at -- let's look at page
8 524 of your -- hold on.

9 We look at page 527 of your report which
10 you've labeled as Exhibit 5-3.

11 You see the title of that Exhibit 5-3 is
12 COC contaminant concentrations in Holcomb Boulevard
13 and Hadnot Point systems during shutdown of the
14 Holcomb Boulevard Water Treatment Plant January 27
15 to February 5th.

16 And you say the water -- okay. So these
17 are the 18 numbers that you used to calculate the
18 average; correct?

19 A. Well, it's probably correct. I don't
20 know.

21 Q. Well, I have questions about it. So I
22 want to make sure we're on the same page.

23 You did the calculations; right?

24 A. Yeah.

↑

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2 Q. Okay. Okay. So if you go back to page
3 5-23 in your report?

4 A. Yes.

5 Q. In the last sentence says -- okay. So
6 the 582 let's go back to that.
7 18 water samples were collected from
8 locations in two distribution systems. The average
9 TCE concentration of treated water was 582
10 micrograms per liter.
11 Do you see that statement? Are with me?
12 A. I see the statement yes.
13 Q. And then the last sentence or you go on
14 to say.
15 The data for the period January 27 to
16 February 5, 1985 that contains the data for the
17 period when the Hadnot Point Water Treatment Plant
18 was providing 100 percent of the Holcomb Boulevard
19 water supply are summarized in Exhibit 5-3 right?
20 A. That's what it says yes.
21 Q. All right. So the data to calculate
22 this average of 582 micrograms per liter are in
23 Exhibit 5-3; correct?
24 A. Well, you know, I have to refresh -- to

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 double-check that but I think it appears to be
3 correct.

4 Q. That's what the report?

5 A. Yeah.

6 Q. Says right?

7 A. (Reviews document.)

8 Yes, I think that's correct.

9 Q. Okay. So I want to ask you about that

10 this data that were used to calculate the the 582

11 microgram per liter average TCE concentration. All

12 right?

13 Exhibit 5-3 shows the location where

14 those samples were taken; correct?

15 A. Yes.

16 Q. Okay. So just for reference, building

17 number 20 is the Hadnot Point Water Treatment Plant

18 right?

19 A. Yes.

20 Q. Okay. And so the last entry on page 527

21 for building number 20 that sample date was February

22 5, 1985.

23 Do you see that?

24 A. Yes.

↑

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2 Q. Okay. And the value for TCE was 429;

3 right?

4 A. Yes.

5 Q. Okay. But that sample was taken the day

6 after HP651 had been shut down correct?

7 A. Same day or the day after. I don't

8 know.

9 Q. Well look at the heading of your Exhibit

10 5-3 on this page. Right in the heading of your

11 Exhibit 5-3?

12 A. Yes.

13 Q. Supply well HP651 was shut down on

14 February 4, 1985 correct?

15 A. Yes.

16 Q. Okay. So this sample of 429 for

17 building 20 was taken a day after HP651 was shut

18 down correct?

19 A. Yes, and -- yes, it represent treated

20 water that is in the reservoirs, yeah.

21 Q. Right. But the whole point of doing

22 this calculation is to figure out what the

23 concentrations were when HP651 was running right?

24 Was being pumped?

↑

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2 A. Yeah, well it was the calculation is
3 what was the water that was delivered on average
4 what was the concentration on average in the water
5 that was delivered in in both areas until February
6 5. That's what I recall.

7 Q. Well let's go back to page 523. The
8 first sentence on page 523 of your report says.

9 There is available data for COC
10 concentrations in treated water from Hadnot Point
11 Water Treatment Plant over the period January 27 to
12 February 5th when it is known that supply well HP
13 651 was being pumped.

14 Okay is it the whole point of this
15 calculation of you're trying to figure out the
16 average TCE concentration in the water while HP 651
17 was being pumped right?

18 A. No, actually this is when the -- when
19 the water that was supplied to both system was
20 coming from Hadnot Point Water Treatment Plant.

21 Q. But the purpose of your calculation is
22 to figure out what how much, how much TCE was in the
23 water when HP 651 was being pumped?

24 A. Yes, and HP 51 -- 651 was being pumped

↑

1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 and said it was shut down on February 4th but then,
3 you know, it takes -- what you have in the
4 reservoirs that is being provided to the rest of the
5 system, it takes -- it takes a while to flush that
6 through.

7 Q. Okay. Well if we look at the number for
8 building number 20 on January 31st right which is
9 two, two lines up, we know on January 31st HP 651
10 was in fact being used right?

11 A. 651? Was being pumped yes.

12 Q. Yes. Okay. And so when on January 31st
13 the number was 900 micrograms per liter right?

14 A. Yes.

15 Q. So it's almost it's more than double
16 than the number the day after HP 651 had been turned
17 off; correct?

18 A. Yes, and you have a variability. You
19 have some variation in the measurements.

20 Q. Is there an explanation for that
21 variation the fact that HP 651 had been turned off
22 the day before?

23 A. Well, it would have some effect but you
24 also have -- I have to go back to this to -- to go

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 into details of where you want to go. You know, you
3 also have dates 1/29/85 that were lower and -- well
4 you have a variability right. It's not one number.
5 And I estimated a number that is representative for
6 the long term things and I did it the way I explain
7 I did it and that's what it is.

8 Q. Let me ask you this. Would you agree
9 that the February 5, 1985 sample from building 20
10 does not represent the concentration of TCE in the
11 water being pumped from Hadnot Point while HP 651 is
12 pumping?

13 A. Well, but it contains water that was
14 pumped at HP 651 and that's why it's contaminated.

15 Q. And it contains it also contains water
16 when HP 651 was not being pumped right?

17 A. Well, that depends on how flush the
18 system was. You have to look at the timing by the
19 hour and, you know, I don't recall detail of that.
20 But it is. You have the effect of 651. No question
21 about it and.

22 Q. There's also no question that there
23 would have been water in that sample that 4/29
24 sample on February 5th that was from wells other

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2 than HP 651 because HP 651 was not being pumped on
3 February 5th right?

4 MS. O'LEARY: Object to
5 foundation.

6 THE WITNESS: Yes, and again I
7 will have to go to the hour. When was it stopped
8 exactly and when how much time it takes to flush the
9 system. And and I see what you what you are getting
10 at. You says you have slightly less concentration
11 then therefore might have should be a little bit
12 higher. It would not change it by much at all.

13 BY MS. BAUGHMAN:

14 Q. Okay. Let me ask you some more
15 questions about this then.

16 Building 670. I think we talked about
17 this earlier. Building 670 is the Holcomb Boulevard
18 Water Treatment Plant right?

19 A. Yes, and that's the reservoirs in that
20 in that system, yes.

21 Q. Okay. So there are 5 samples included
22 in your calculation on Exhibit 5-3 that were from
23 building 670.

24 Do you see that?

↑

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2 A. Yes.

3 Q. Okay. And the numbers of TCE at
4 building 670 the Holcomb Boulevard Water Treatment
5 Plant the measurements for TCE were 8.2, 340, 27, 24
6 and 26; right?

7 A. Let me just get to find it. Where did
8 you get the 842?

9 Oh, yeah. Yes.

10 Q. Okay. And two of those samples were
11 taken on January 29th and three of them were taken
12 on January 31, 1985; right?

13 A. Yes.

14 Q. Okay. And I averaged those five and,
15 you know, I could you could use a calculator your
16 phone or whatever, it probably sounds right. If you
17 have the 8.2, 340, 27, 24 and 26 the average is 85
18 micrograms per liter okay? Take my word for that.
19 Let me ask you this question.

20 Do you believe 85 micrograms per liter
21 is representative of the amount of TCE in Hadnot
22 Point Water Treatment Plant water when 651 is

23 running?

24 MS. O'LEARY: Object to form and

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2 foundation.

3 THE WITNESS: Well, the 651 was
4 running during that time right and the systems were
5 connected. So the water on average that was
6 provided by the system included what was in the
7 reservoirs at 670 and that's basically -- that's
8 basically my understanding of the system.

9 BY MS. BAUGHMAN:

10 Q. Okay.

11 A. So all of this was representative of the
12 system. So some places receive water with low
13 concentration and some places with higher
14 concentrations. The purpose of what I did was to
15 get an estimate of the long time estimate as I said
16 of how much concentration of TCE the water supplied
17 by Hadnot Point would contain when the effect of 651
18 is filled.

19 Q. Right. Okay. So let me ask you this.

20 How during this time frame of January 27

21 to February 5, 1985 how were -- how did Hadnot Point

22 water treatment -- Hadnot Point provide the water to
23 Holcomb Boulevard like how did Hadnot Point actually
24 get into the Holcomb Boulevard system?

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2 A. Right. My understanding is that you
3 have connection. You have two connections. That's
4 what I recall and they open at least one of them and
5 then it goes into the system and the distribution
6 system in my assumptions goes through the reservoir
7 of 670 to kind of keep pushing that through.

8 Q. Okay. So you're saying okay. The
9 connection is in the piping in the water
10 distribution system between Hadnot Point and Holcomb
11 Boulevard right?

12 A. (Nods head).

13 Q. Okay. So so water in the Hadnot Point
14 water distribution point gets into the Holcomb
15 Boulevard water distribution system correct?

16 A. (Nods head).

17 Q. Okay. Is there a way for water that's
18 in the water distribution system of Holcomb
19 Boulevard to get into the Holcomb Boulevard Water
20 Treatment Plant?

21 A. It's not a treatment. It's a reservoir.
22 It's not -- it's after the treatment plant. It's a
23 reservoir.

24 Q. Okay. So how does water that's in the

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Holcomb Boulevard water distribution system end up
3 in the reservoir?

4 A. Because everything is connected. That's
5 my understanding.

6 Q. Are there not valves that prevent water
7 in the water distribution system from backing up
8 into the reservoir?

9 A. I do not know about the valve situation
10 an exactly there.

11 Q. Did you investigate that?

12 A. I did not investigate that. I made the
13 assumptions that I made in my in my report.

14 Q. Does the Holcomb Boulevard Water
15 Treatment Plant have a back flow prevention from the
16 distribution system into the reservoir?

17 A. That I do not know.

18 Q. Do you know what a check valve is?

19 A. I do.

20 Q. What is it?

21 A. It's it's a valve that basically forces
22 a flow to go only in one direction. If it goes in
23 the other one it tends to shut down if it's
24 perfectly working.

↑

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2 Q. So were there check valves in the
3 Holcomb Boulevard water distribution system to
4 prevent water from the distribution system to back
5 up into the reservoir?

6 A. I do not know. I assume that it was not
7 the case. I assume that the waters that was
8 delivered is the waters that is characterized by
9 this data and I made that calculation as I explained
10 it and if I am wrong well maybe I would be corrected
11 if I am shown wrong but this is what I did.

12 Q. Just a minute.

13 Would it make sense that there would be
14 check valves to prevent water from the Holcomb
15 Boulevard water distribution system from backing up
16 into the reservoir?

17 A. I don't know. I don't have an answer
18 for that.

19 Q. Did you talk to anyone at the Holcomb
20 Boulevard or Hadnot Point who works at those
21 treatment plants or anyone from Camp Lejeune about
22 whether there are check valves to prevent water from
23 the Holcomb Boulevard distribution system from
24 backing up into the reservoir?

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2 A. I have not asked that question.

3 Q. Okay. If there were check valves to
4 prevent water from the Holcomb Boulevard water
5 distribution system from backing up into the
6 reservoir, then your, your numbers for building 670
7 should not have been used in this calculation.
8 Would you agree with me?

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: Well, we can -- we
12 can argue about that. That depends. Again that
13 depends of the setup on the piping and and all of
14 that and whether or not those reservoirs were still
15 providing certain areas with water.

16 BY MS. BAUGHMAN:

17 Q. Well?

18 A. I don't -- I told you I don't know if
19 there was check valves or not and I assumed that
20 that was part of the system. And that's was
21 concentrations that were in the system. That's what
22 I assumed.

23 Q. You assumed that water from the Hadnot
24 Point Water Treatment Plant while 651 was pumping

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2 would get into the Holcomb Boulevard distribution
3 system and then would be able to back up into the
4 reservoir for Holcomb Boulevard; right?

5 A. Again, I just assume that's part of the
6 system. That's the data for the system. I just
7 made a simple average of all of that to presence to
8 long term. Whether it's 582 or 600 or we can argue
9 about that, but I clearly stated the way I did it.

10 Q. Let me ask you.

11 The sample that says building -- it's
12 the third one. Building 670 upstream of reservoir
13 in your Exhibit 5-3.

14 What does upstream of reservoir mean?

15 A. Well, it's upstream of the reservoir.

16 Q. So that's not a sample from the

17 reservoir right?

18 A. This is just how it was described and I
19 would interpret that as you say that it's upstream
20 from the reservoir. That means it's as the water
21 flows.

22 Q. That would be part?

23 A. It would be before the reservoir but it
24 could still be treated water. It could still be the

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2 water that is being provided.

3 Q. Well the water that was being provided
4 in that time frame of January 27 to February 5, 1985
5 was not coming from the Holcomb Boulevard reservoir
6 right?

7 MS. O'LEARY: Object to
8 foundation.

9 THE WITNESS: Well.

10 BY MS. BAUGHMAN:

11 Q. Because Holcomb Boulevard Water
12 Treatment Plant was shut down right?

13 MS. O'LEARY: Same objection.

14 THE WITNESS: What was shut down
15 was the treatment right? Because you had some con

16 testimony nation in the system. That was shut down.

17 You had a fuel leak if I recall.

18 BY MS. BAUGHMAN:

19 Q. Right.

20 A. That was shut down.

21 Q. Right. Where was the fuel leak? Do you
22 remember?

23 A. It was I believe it was on top of one
24 reservoir. I don't remember the details of it.

↑

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2 Q. So building 670 the reservoir here that
3 was sampled and included in your calculations was
4 that the reservoir that had the leak in it?

5 A. I do not know that.

6 Q. Okay.

7 A. It is a description of where exactly the
8 sample was taken is not I could not figure out
9 exactly where it was.

10 Q. Okay. I'm going to hand you what I've
11 marked as Exhibit 42 to your deposition.

12 (Document marked for
13 identification as Exhibit 42.)

14 BY MS. BAUGHMAN:

15 Q. And Exhibit 42 is a one page document
16 Bates-stamped CLJA USMC GEN and the last four
17 numbers are 6684.

18 Have you seen this document before?

19 A. Specifically that one single page here.
20 I may have seen it. I don't know for sure.

21 Q. Okay. So you see this starts out at the
22 top Sunday January 27, 1985 at 1300 and it describes
23 what happened there in terms of that gasoline leak?

24 A. Right.

↑

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2 Q. Right? And about 25 percent down the
3 page it says.

4 Then the reservoir was drained of 1
5 million gallons and hosed down with fire hose for
6 several hours.

7 Do you see that?

8 A. Exactly.

9 Q. And that's referring to a reservoir at
10 the Holcomb Boulevard Water Treatment Plant;
11 correct?

12 A. That's correct.

13 Q. Okay. And that's all on the entry for

14 Sunday January 27th; correct?

15 A. That's correct.

16 Q. Then it says.

17 Monday January 28th the reservoir was
18 refilled at 1400, which would be 2:00 PM correct?

19 Then it says plant turned -- I'm sorry.

20 It says the reservoir was refilled, at
21 1400 plant turned off.

22 Do you see that?

23 A. I see that.

24 Q. Okay. What water was used to refill

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2 that reservoir? With where did it come from?

3 A. Well, that may be the explanation of why
4 you had contamination in that reservoir. It's just
5 I don't know where exactly where it came from. It
6 may have come partly from Hadnot Point Water
7 Treatment Plant and partly from.

8 Q. But you don't know?

9 A. And partly from some wells.

10 I do not know but it was refilled with
11 water and that water was not something that went
12 through the plant.

13 Q. Well how do you know that it wasn't
14 refilled with water from Holcomb Boulevard?
15 A. Well, I don't know.
16 Q. You don't know either way.
17 A. Either way.
18 Q. Okay.
19 A. But the fact that it had some
20 contamination in it it may have been a blended
21 matter because you need a million gallon of water to
22 take it where you can.
23 Q. Well let's talk about that for a minute.
24 If we don't if we set aside the upstream

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2 of reservoir sample because we don't know where that
3 was taken right?
4 The four other samples from building 670
5 Holcomb Boulevard reservoir are 8.2, 27, 24 and 26.
6 Do you see that?
7 A. I see that.
8 Q. They're very low right?
9 A. Yeah.
10 Q. So we don't know how that reservoir was
11 refilled; correct? What water was used to refill

12 it; fair?

13 A. We don't know.

14 Q. Okay.

15 A. But it had some contamination in it.

16 Q. Yeah. If the Holcomb Boulevard
17 reservoir did not have check valves to prevent water
18 from the Holcomb Boulevard distribution system from
19 going into the reservoir, wouldn't the reservoir
20 overflow?

21 A. You have overflow. You have overflow
22 vents or overflow structures in each reservoir. So
23 they could overflow but if you put more water than
24 the reservoir contains it would overflow. I mean,

↑

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2 that's a logical thing right?

3 Q. Do you consider yourself an expert in
4 the design of water treatment plants?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: I am not an expert
7 in the design of Water Treatment Plant.

8 BY MS. BAUGHMAN:

9 Q. Okay.

10 A. But I have seen many of them and I have

11 visited these.

12 Q. Okay. Isn't it normal for Water
13 Treatment Plant to have a check valve to prevent the
14 water in the distribution system from backing up
15 into the reservoir?

16 MS. O'LEARY: Object to
17 foundation.

18 BY MS. BAUGHMAN:

19 Q. Isn't that the ordinary way these things
20 are designed?

21 MS. O'LEARY: Object to
22 foundation.

23 THE WITNESS: It can be ordinary
24 way but specifically for those I do not know.

↑

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2 BY MS. BAUGHMAN:

3 Q. Okay. Let me ask you both times.

4 Do you know whether it is standard
5 practice to have a check valve in a Water Treatment
6 Plant to prevent water from the distribution system
7 from backing up into the reservoir do you know?

8 A. I -- it would make sense to but I do not
9 know specifically for those if it was that way. It

10 would make sense.

11 Q. It would make sense and you did not
12 investigate whether there was a check valve
13 preventing water from the Holcomb Boulevard
14 distribution system from backing up into the
15 reservoir. You did not look into that is that true?

16 A. I did not look into that.

17 Q. Okay. And just to be clear to make sure
18 we're on the same page. If you turn to page 5-33 of
19 your report in Opinion 7 you talk about the Holcomb
20 Boulevard Water Treatment Plant and in the last
21 sentence on this page you talk about the connection
22 between Hadnot Point and Holcomb Boulevard and you
23 say.

24 When this occurred, you're referring to

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2 when when there was high demand such that Holcomb
3 Boulevard did not have sufficient water levels, you
4 said.

5 When this occurred, Hadnot Point Water
6 Treatment Plant provided supplemental water through
7 a bypass valve or a booster station that allowed
8 Hadnot Point Water Treatment Plant water to

9 supplement Holcomb Boulevard Water Treatment Plant.

10 Do you see that?

11 A. I see that yes.

12 Q. Is it your opinion that during the time
13 frame of January 27 to February 5, 1985 it was the
14 bypass valve or the booster station that allowed
15 Hadnot Point to provide water to the Holcomb
16 Boulevard distribution system?

17 A. That was one of the connections. I
18 don't recall exactly the name of it but it was -- I
19 think it was one of the connections that was open.

20 Q. Are there any other ways for Hadnot
21 Point to provide water to Holcomb Boulevard other
22 than this bypass valve or booster station?

23 A. I think there were two connections and I
24 don't remember the name of them.

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2 Q. Okay. But they're part of the
3 distribution system right? The two distribution
4 systems are connected. There's a way to connect
5 them with a valve?

6 A. Yeah, that's the connections between the
7 two systems. Yeah.

8 Q. All right.

9 A. That's my understanding.

10 Q. All right. So I want to ask you a few

11 questions about tank SLCH4004. That's one of the

12 numbers on Exhibit 5-3 the measurement of 318.

13 Do you know where that tank is located?

14 A. Hold on. Hold on. You are losing me

15 here. 5-3?

16 Q. Yes. It's page 5-27 of your report.

17 A. Oh, sorry. I thought it was a page.

18 5-3. Start to be a bit mixed up here. Okay.

19 Q. Okay.

20 A. Sorry for that.

21 Q. Okay. You're on page 5-27 of your

22 report right?

23 A. Yes.

24 Q. Okay. So I just want to ask a few

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 questions about the sample for tank SLCH4004 do you

3 see that?

4 A. Hold on. Hold on. Tank tank tank.

5 S-2323.

6 Q. No S it says SLCH4004. The bottom third

7 of the page.

8 A. Oh, tank S okay.

9 Q. Okay. So that had a measurement of 318

10 micrograms per liter.

11 Do you see that?

12 A. I see that.

13 Q. Okay. Do you know where that tank is

14 located?

15 A. I do not recall.

16 Q. Okay. So we looked it up and it's a

17 midway park water tower and would you agree that the

18 midway park water tower is furthest from the Hadnot

19 Point Water Treatment Plant?

20 MS. O'LEARY: Object to form and

21 foundation.

22 THE WITNESS: I I cannot answer

23 that question just like this. I don't recollect.

24 BY MS. BAUGHMAN:

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2 Q. Okay. Okay. Do you know whether there

3 was contaminant water in the midway park water tower

4 when Holcomb Boulevard treatment plant was shut

5 down?

6 MS. O'LEARY: Object to form.

7 THE WITNESS: I don't know that.

8 I don't know.

9 BY MS. BAUGHMAN:

10 Q. Do you know whether there was a mixed at
11 Hadnot Point and Holcomb Boulevard water in the
12 midway park water tower when this sample was taken
13 on January 31st?

14 A. I don't recollect. I don't I don't
15 know. I don't recollect. I mean, this is digging
16 in the details that I don't recollect.

17 Q. Okay. Now you'd agree that if we don't
18 include at a minimum the samples from building 670
19 the Holcomb Boulevard Water Treatment Plant
20 reservoir that your number for the average amount of
21 TCE in the water when HP 651 was running would be
22 substantially higher?

23 MS. O'LEARY: Object to form.

24 THE WITNESS: I would agree with

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2 that.

3 BY MS. BAUGHMAN:

4 Q. Okay.

5 A. If it -- if you exclude those values
6 that are lower than the rest it will raise the
7 average of. Yes, I agree with that.

8 Q. Okay. So in your report you talk about
9 performing a check on your calculations. This is on
10 page 5-29. Right after your -- the calculation of
11 .39 times 582 you say that there was a check on the
12 validity on the 227 microgram per liter average.

13 Do you see that?

14 A. I see that.

15 Q. Okay. And part of that included you
16 used in that first sentence you say that your check
17 on the validity of the 227 microgram per liter
18 average TCE concentration can be made using ATSDR
19 assumption of 28 wells pumping and then you cite
20 Morris Maslia ATSDR report from March 2013.

21 Do you see that?

22 A. I see that.

23 Q. Okay. So so when you're doing this
24 check you're assuming that 28 wells were pumping at

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2 the same time at the Hadnot Point Water Treatment
3 Plant; right?

4 A. Yes. Yes. I borrowed the assumption
5 that that ATSDR had done that. You have -- to
6 satisfy the demand you had an average of 28 wells
7 pumping over the long period of time.

8 Q. I'm handing you what I've marked as
9 Exhibit 43 to your deposition.

10 (Document marked for
11 identification as Exhibit 43.)

12 BY MS. BAUGHMAN:

13 Q. Which is the report that you cite in
14 footnote 100; correct? And that we marked for the
15 record it's chapter A summary of findings, summary
16 and findings and this is from Hadnot Point Holcomb
17 Boulevard March 2013 and it is Exhibit 43. It
18 starts at CLJA water modeling 01-000942579.

19 Actually let me make sure. Let me see
20 that.

21 A. (Hands document).

22 Q. Okay. Good.

23 All right. So I want to go to where
24 you've referenced what you've referenced for the 28

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 wells pumping which would be on page A14.

3 Wouldn't you agree that what figure A6
4 on page A14 is showing is the number of operating
5 wells not the number of wells pumping at the same
6 time?

7 MS. O'LEARY: Object to
8 foundation.

9 THE WITNESS: Well, my
10 understanding is that my reading of that it was that
11 those were are the ones that are being operated to
12 satisfy the demand that you have on top of the was
13 the figure.

14 BY MS. BAUGHMAN:

15 Q. So if you're looking for your A5 that's
16 on page A12, this shows the operational chronology.
17 This shows when wells were in operation; correct?

18 A. (Reviews document.)
19 Where does it say that?

20 Q. Well the title is "Operational
21 chronology" right?

22 A. Yeah.

23 Q. And it's providing when it started and
24 when it stopped?

↑

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2 A. Yeah, it says that yes.

3 Q. Right. And then if you turn to page A11
4 at the very last text on page A11 says.

5 An operational chronology for water
6 supply wells in the study area during the period
7 1942 to 2008 is shown in figure A5.

8 Right?

9 This graph shows dates of operations for
10 each well that supplied raw water to the water
11 treatment plants and the dates when some of the
12 wells were permanently taken out of service.

13 So you agree that's what A5 means?

14 A. You lost me. I don't know where you
15 are.

16 Q. Okay. Page A11?

17 A. Yeah.

18 Q. The very last set of text like the last
19 last full sentence on that page last two figures is
20 referring to figure A5.

21 And it says.

22 An operational chronology?

23 A. Hold on. I don't know where you are.

24 Q. Look at my look at my you see this pink

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2 part here. That's where I'm reading from on page
3 A11?

4 A. Okay. Okay.

5 Q. Okay.

6 A. Thank you.

7 Q. It says.

8 An operational chronology for water
9 supply wells in the study area during the period
10 1942 to 2008 is shown in figure A5.

11 Which we were just looking at right?

12 A. Uh-huh.

13 Q. Okay. This graph shows dates of
14 operation for each well that supplied raw water to
15 the water treatment plants and the dates when some
16 of the wells were permanently taken out of service.

17 So you agree with me that that's what
18 figure A5 shows right?

19 A. That's my understanding yes.

20 Q. Okay. Then if you look at page A13 of
21 this report, there is a sentence and I'm going to I
22 highlighted it here so you can see generally where
23 on the page it is on A13 okay? And it says.

24 Based on documented and reconstructed

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2 information an average of 28 wells supplied water
3 each month to the Hadnot Point Water Treatment Plant
4 during the period 1942 to 2008.

5 Do you see that?

6 A. I see that.

7 Q. And then that refers to figure A6 which
8 is what you cited in your -- in your report right?

9 MS. O'LEARY: Object to form and
10 foundation.

11 THE WITNESS: Okay.

12 BY MS. BAUGHMAN:

13 Q. Okay. So that's an average of 28
14 supplied water each month. That doesn't say that
15 they were supplying them all at the same time does
16 it?

17 MS. O'LEARY: Object to form and
18 foundation.

19 THE WITNESS: What my reading of
20 this was that to satisfy the demand for this figure
21 A6. To satisfy the demand that is on top of the
22 figure this is the wells that you had to operate.
23 And and on average you had to operate 28 wells on a
24 monthly average basis to -- to satisfy the demands.

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2 That's what -- that's the way I read this.

3 BY MS. BAUGHMAN:

4 Q. Let me ask you about that. I'm going to
5 give you. Okay. I'm handing you what I've marked
6 as Exhibit 44 to your deposition.

7 (Document marked for
8 identification as Exhibit 44.)

9 THE WITNESS: Thank you.

10 BY MS. BAUGHMAN:

11 Q. Exhibit 44 I believe is also for the
12 record it's Bates-stamped CLJA water modeling
13 07-0000019001 through 19004.

14 Now I believe that this Exhibit 44
15 actually is in your report. Just have to figure out
16 where. Here it is.

17 Okay. So in your report on page 4-18
18 it's Exhibit I9 of your report. This is -- this is
19 information that you used to determine -- I'll wait
20 till you get there. Are you looking for your
21 report?

22 A. What page are you?

23 Q. Page 4-18?

24 A. 4-18?

↑

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2 Q. Yeah.

3 A. Yes, I am there.

4 Q. Okay. So Exhibit 4-18 is a document
5 that you used to determine the frequency of use of
6 supply wells from November 18, '84 to February 4,
7 '85. You used this to determine that 39 percent
8 pumping frequency for HP 651 correct?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: Yes, that's the
11 information that I found.

12 BY MS. BAUGHMAN:

13 Q. Okay.

14 A. For that well.

15 Q. Okay. Let me ask you. If you look at
16 this document, the last, the last 8 wells like on I9
17 those are -- those are wells that service Holcomb
18 Boulevard; correct?

19 A. I don't recall that but possible.

20 Q. Okay. Okay. So assuming that's true
21 and I believe it is true that those are all serving
22 Holcomb Boulevard, one could add up how many wells

23 were operating on each day to figure out based on
24 what -- based on your assumption of 28 shouldn't

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 there be 28 wells operating for Hadnot Point each
3 day to make your assumption of 28 correct for your
4 calculation?

5 MS. O'LEARY: Object to form and
6 foundation.

7 THE WITNESS: First of all the
8 assumption I made is the way I end up with it is
9 what is written in the ATSDR report right.

10 BY MS. BAUGHMAN:

11 Q. Okay.

12 A. Now this period of time here is a
13 particular period of time. It's when you had
14 incidents and and some wells were shut down and
15 those kind of issues. So this this was during
16 basically the period where they were trying to
17 figure out what the heck is going on and this, you
18 know, some wells were not being used because of
19 that.

20 So so that that. And this is the data
21 and I looked at that data and this is 39 percent of

22 the time, 651 was down. I have no other data for
23 the frequency of use of 651.

24 Q. Okay.

↑

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2 A. It could have been less. It could have
3 been more.

4 Q. But you would agree that this period of
5 time November 20, 84 to February 4, 1985 was not
6 necessarily representative of how the wells were
7 operated in the for the Hadnot Point water
8 distribution system because they were making this
9 investigation about contamination right?

10 A. I.

11 MS. O'LEARY: Object to form and
12 foundation.

13 BY MS. BAUGHMAN:

14 Q. Isn't that what you just said?

15 A. What I said is that during that period
16 of time some wells had been shut down right. So you
17 had less wells available in that sense and the 39
18 percent if you had more wells logic liquid could
19 have been less.

20 Q. Well isn't it also true in the 7 months

21 prior to your time frame of November 28, '84 to
22 February 4, '85 there were 6 or 7 wells that were
23 new that had just come online?

24 MS. O'LEARY: Object to

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2 foundation.

3 THE WITNESS: There were some new
4 ones that were that were available.

5 BY MS. BAUGHMAN:

6 Q. And they were being used they were being
7 pumped?

8 A. Well, that I would.

9 MS. O'LEARY: Objection.
10 Foundation.

11 THE WITNESS: There I would have
12 you have to show me where that is being said for
13 those particular wells.

14 BY MS. BAUGHMAN:

15 Q. Okay. Would it surprise you that if you
16 added up on your Exhibit I9 the number of Hadnot
17 Point wells that were operating from November 28 to
18 February 4 that it was on average of 13 per day?

19 MS. O'LEARY: Object to form and

20 foundation.

21 BY MS. BAUGHMAN:

22 Q. Based on Exhibit I9?

23 MS. O'LEARY: Same objections.

24 THE WITNESS: It could be but it

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2 is also a period of time where less water was being
3 used as well. You had some period of time
4 historically where more water was because the base
5 was more busy and so on.

6 BY MS. BAUGHMAN:

7 Q. So you're saying from November 28, 1984
8 to February 4, 1985 there was less water being used
9 than normal?

10 A. Well, than for just a single system.
11 You have to go back to that figure you had where I
12 say it's figure A15 I believe. You know, again I
13 have to get through memory about those kind of
14 things and if I -- I would like to see that figure
15 A15 again.

16 Q. A14. A I think you're looking?

17 MS. O'LEARY: A5.

18 THE WITNESS: Oh, was it A5 yeah.

19 BY MS. BAUGHMAN:

20 Q. So we were looking at.

21 A. Yeah, yeah.

22 Q. It's page A12.

23 A. That's figure A6. A6.

24 Q. Yeah, it's page A14. Okay.

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2 A. A6. A6.

3 Q. So let me ask you the question again.

4 Are you -- I think you told me just a
5 minute ago that the time frame of November 28, '84
6 to February 4, '85 was a time frame when there was
7 less demand for water than normal. Is that your
8 testimony?

9 A. My testimony is that if you go to figure
10 A6 that shows basically total monthly flow in
11 millions of gallons per day right for the Hadnot
12 Point system. You can see that over some period of
13 time it was close to 5 million gallon per day. And
14 when you go down to the -- to the 85 percent of time
15 it was a lot more like 3. So it's much you use less
16 wells because of that.

17 Q. And and you'd pump less water from the

18 wells?

19 A. No, I don't think so. I think you use
20 less wells.

21 Q. Okay. So if the demand is lower then
22 that means the amount of water going through the
23 treatment plant is lower right?

24 A. Yes.

↑

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2 Q. Okay. So you'd need less water from the
3 wells right?

4 A. No. You need less wells.

5 Q. And less water?

6 A. You need less number of wells to put use
7 the water you need.

8 Q. Right. Which is a lower amount of water
9 than normal?

10 A. Not normal that's the amount of water
11 you need. So how many wells you need to provide
12 that water because those wells basically when you
13 put them on they produce what they produce.

14 Q. Okay. So in the earlier time frame
15 let's say from the 1940s all the way through January
16 1970 there would be more wells being operated. Is

17 that what you're saying?

18 MS. O'LEARY: Object to form.

19 THE WITNESS: I would -- I would
20 logically say yes, you need more wells during that
21 period of time. Yes.

22 BY MS. BAUGHMAN:

23 Q. Okay. So when you're doing this check
24 on the system you assumed 28 wells pumping and 39

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2 percent frequency of use for 651?

3 MS. O'LEARY: What page is that.

4 MS. BAUGHMAN: Page 529 at the
5 bottom.

6 BY MS. BAUGHMAN:

7 Q. And you used a value of 16,297 in water
8 pumped from Hadnot Point 651 right?

9 A. That's a reasonable calculation.

10 Q. Okay.

11 A. Right? That means you had high
12 contamination in 651. That's what it says.

13 Q. Uh-huh.

14 A. And it's pretty close to what was
15 measured in 651.

16 Q. Right. But you're talking about a
17 measured -- so the end of the sentence you say.
18 Which is consistent with the measured
19 TCE concentration of 18,900 micrograms per liter
20 when supply well HP 651 was pumping in February
21 1985.
22 Correct?
23 A. Yeah.
24 Q. Okay.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 A. That's when you have a measurement.
3 Q. But while you're doing this measurement
4 in February '85 there weren't 28 wells pumping then
5 there was much less right?
6 MS. O'LEARY: Object to
7 foundation.
8 THE WITNESS: Yes, and if you have
9 less wells that means the concentration would have
10 been higher.
11 BY MS. BAUGHMAN:
12 Q. Right.
13 A. On the calculated concentration would
14 have been higher and closer to the 19,000.

15 Q. But it wouldn't be correct -- the
16 calculations at the top of page 530, it wasn't
17 correct to use 28 divided by .83 because there
18 weren't 28 wells pumping in February 1985. We know
19 that based on your Exhibit I9 where you can count
20 the number of X's and determine in that time frame
21 how many wells were pumping right?

22 MS. O'LEARY: Object to form and
23 foundation.

24 THE WITNESS: Yes, and again I am

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 talking about long term here.

3 BY MS. BAUGHMAN:

4 Q. But this calculation wasn't done for
5 long term this is?

6 A. No, it is. The calculation compares
7 just two things. It's what you would calculate
8 making the assumption that I made right? It's a 28
9 wells and the average concentration that's what you
10 would calculate. You get 16,000. What was measured
11 in a device 19,000. For me this indicates this this
12 well was heavily contaminated I'm not saying that
13 it's an exact value. It was heavily contaminated

14 and it's consistent with that.

15 Q. Okay. But your calculation is dividing
16 by 28 wells?

17 A. Yes.

18 Q. For a number from February 1985 and
19 there were not 28 wells?

20 A. Right.

21 Q. Pumping in '85 correct?

22 A. Well, according to the information we
23 have, there were less wells pumping then.

24 Q. Right.

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2 A. But that will give you concentrations at
3 a higher. That's consistent with this well 651
4 being the well that is heavily contaminated.

5 Q. I'm going to ask you some more questions
6 about Exhibit I9 in your report. So going back to
7 page 4-18 of your report.

8 We agreed that this is the data that you
9 used to determine to reach your result that Hadnot
10 Point 651 pumped 39 percent of the time; correct?

11 A. Again which page is that?

12 Q. 4-18.

13 A. Sorry. Okay. That's the only data
14 available that shows you by people who are working
15 there which well were on which wells were off.
16 Q. Okay.
17 A. During the period of time that is dated.
18 Q. Let me ask you about that then.
19 Who prepared the document that is your
20 Exhibit I9? Who who prepared it?
21 A. Well, basically it is a reproduction of
22 what is in Exhibit 44.
23 Q. Right.
24 A. Which is handwritten and put it into an

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2 Excel spreadsheet.
3 Q. Okay.
4 A. And I probably have one of my staff to
5 do it.
6 Q. Okay. So let me let me ask a different
7 question.
8 Who prepared Exhibit 44?
9 A. Somebody at the base.
10 Q. Who at the base?
11 A. I do not know.

12 Q. When was Exhibit 44 prepared? And wait
13 for the record I think you just said this but just
14 for the record Exhibit 44 is the document that is
15 the basis for your Exhibit I9; correct?

16 A. Yes.

17 Q. Okay. When was Exhibit 44 prepared?

18 A. The exact date I don't know but it would
19 have been after, after the last date that you have
20 on the -- on this which is, you know, after January
21 6, 1985.

22 Q. Okay. But do you know if it was
23 prepared in 1985 or years after that?

24 A. That I do not know. That's the only

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 document we found that is an independent document
3 that is doesn't have any, anything that's done by,
4 you know, either me or somebody else.
5 It's -- that's the information that's out there in
6 the file.

7 Q. Right. But you don't know when it was
8 prepared? You do not know when Exhibit 44 was
9 prepared correct?

10 A. Well, I do not know when exactly it was

11 prepared, no.

12 Q. Okay. Do you know what the source of
13 information was, in other words, whoever prepared
14 Exhibit 44, what did they use to prepare this?

15 A. They use their knowledge of the system.
16 That's what I understand.

17 Q. You understand based on what?

18 A. Because it was prepared for them when
19 they were just trying to figure out the problem and
20 and, you know, I don't know who did that but it was
21 not done by either ATSDR or myself or anybody else.
22 It was done by people that worked at the plant and
23 this is basically something that you accept like you
24 accept data sheets from the laboratories that are

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 handwritten.

3 Q. How do you know it was how do you know
4 Exhibit 44 was prepared by someone at the plant?
5 Where does it say that?

6 A. Well, that's my deduction because it was
7 part of the documents that were basically archived
8 and and produced and those documents were from the
9 base. They were not from anybody else.

10 Q. So do you know whether Exhibit 44 was
11 prepared based on other documents and data or was it
12 prepared as things were happening at the time? Like
13 what was the source of the information used to
14 prepare Exhibit 44?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: My understanding is
17 that the knowledge of the people at the plant and
18 for some reason that was done.

19 BY MS. BAUGHMAN:

20 Q. And you say that's your understanding.
21 That's you're speculating aren't you?

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Well, I am taking
24 that as information that's independent and that's

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 available.

3 BY MS. BAUGHMAN:

4 Q. Okay. But you don't know who prepared
5 Exhibit 44 and you don't know when it was prepared
6 right?

7 MS. O'LEARY: Object to form.

8 Asked and answered.

9 THE WITNESS: I answered that.
10 I do not know who prepared it and
11 I don't know exactly when it was prepared.
12 BY MS. BAUGHMAN:
13 Q. Okay. And you don't know how it was
14 prepared based on some compilation of other
15 information or data you don't know how this was
16 prepared. Fair?
17 MS. O'LEARY: Object to form.
18 THE WITNESS: Somebody at the
19 Water Treatment Plant put this together at some
20 point. That's all I know.
21 BY MS. BAUGHMAN:
22 Q. But you don't know what they based it
23 on?
24 MS. O'LEARY: Object to form.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 THE WITNESS: I know they based
3 it on their knowledge.

4 BY MS. BAUGHMAN:

5 Q. And that's your guess?

6 MS. O'LEARY: Object to form.

7 THE WITNESS: Obviously I did not

8 invent that. They based it on their knowledge.

9 BY MS. BAUGHMAN:

10 Q. And you're basing that on what?

11 A. You don't generate a document like this
12 in the archive material just dreaming of it. You
13 base it on something which is knowledge and that's
14 my understanding and that's -- that's the only
15 document that talks about how often the wells were
16 cycled and it is in the record that the wells were
17 cycled. They were not always on. None of them were
18 always on.

19 Q. Have you had any conversations with
20 anyone who worked at any water -- at the Hadnot
21 Point well this is about the Hadnot Point Water
22 Treatment Plant right?

23 So have you had any conversations with
24 anyone who worked at Hadnot Point Water Treatment

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Plant about Exhibit 44?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: I don't recall
5 exactly but I think that I had asked. I mean,
6 nobody knew anything about that. That's my

7 understanding and the reason nobody knew about that
8 is because the people who are still there or were
9 still there in 2005 and later weren't there when
10 that was done. That's all I know or at least none
11 of them knew about who did that.

12 BY MS. BAUGHMAN:

13 Q. Okay. So so you actually took this
14 Exhibit 44 to Hadnot Point and asked people who
15 worked there about it?

16 A. No.

17 MS. O'LEARY: Object to form and
18 foundation.

19 THE WITNESS: Sorry.

20 I did not do that. I did not take
21 this and show them who did this. I just -- I
22 vaguely recall that I ask, you know, you have some
23 information on when the wells were used or not and
24 who knows about that and there was nobody there who

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 knew about it.

3 BY MS. BAUGHMAN:

4 Q. Okay.

5 A. Or the frequency of use of the wells.

6 Q. So you haven't asked anyone who worked
7 at the water -- at the Hadnot Point Water Treatment
8 Plant specifically about Exhibit 44 is that true?

9 A. I don't recall if I did or not but
10 nobody -- my recollection is that nobody knew
11 anything about this.

12 MS. O'LEARY: Have we been going.

13 THE WITNESS: That are still
14 there.

15 MS. O'LEARY: Sorry we've been
16 going a little over an hour can we take a just a
17 short break.

18 MS. BAUGHMAN: Let me finish up on
19 couple of things on this and then we can do that.

20 BY MS. BAUGHMAN:

21 Q. Okay. Can you tell me the name of
22 anyone who you spoke to regarding Exhibit 44 and how
23 it was prepared?

24 MS. O'LEARY: Object to

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 foundation.

3 THE WITNESS: I cannot tell you
4 the name of anyone.

5 BY MS. BAUGHMAN:

6 Q. Okay. If you want we can take a break.

7 That's fine.

8 THE VIDEOGRAPHER: The time is

9 12:52 PM. We are now off the record.

10 (A recess was taken.)

11 THE VIDEOGRAPHER: The time is

12 1:06 PM. We are now on the record.

13 MS. BAUGHMAN: Thank you.

14 BY MS. BAUGHMAN:

15 Q. Okay. Dr. Hennet I'm going to hand you

16 what I've marked as Exhibits 45 and 46 to your

17 deposition?

18 (Document marked for

19 identification as Exhibit 45 and 46.)

20 BY MS. BAUGHMAN:

21 Q. Exhibit 45 is CLJA water modeling

22 050001040308 through 319, and it starts questions

23 for Mr. Mundt dated August 5, 2008.

24 Exhibit 46 is CLJA underscore U.S.

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 T020004149161 through 9194.

3 Okay. There you go.

4 A. Thank you.

5 MS. BAUGHMAN: And let me give
6 you. There you go.

7 BY MS. BAUGHMAN:

8 Q. Okay. So have you seen these documents
9 before?

10 A. (Reviews document.)

11

12 Q. And I'll provide some context if it
13 helps.

14 Exhibit 45 are questions sent by ATSDR
15 to Mr. Mundt who is a Water Treatment Plant employee
16 and Exhibit 46 are the answers provided back.

17 So with that context are these documents
18 you've reviewed before?

19 A. I don't know. I don't recollect these
20 documents.

21 Q. You don't recall them?

22 A. I don't recall. I don't know if I ever
23 saw them. I don't know.

24 Q. Okay. All right. So what I want to

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 draw your attention to is 45 just has the blank

3 questions right that were sent. 46 are the answers
4 that the ATSDR received back and if you go to page
5 that's Bates-stamped the last three numbers are 165
6 of Exhibit 46.

7 Question number 6.

8 A. Wait hold on. Can you repeat that I was
9 on the other exhibit.

10 Q. Yeah. It's Exhibit 46 the last three
11 numbers are 165.

12 A. Okay.

13 Q. Okay. So question number 6. ATSDR
14 asked.

15 We found documents showing the daily
16 pumping status for all Hadnot Point wells from
17 November 28, 1984 to February 4, 1985.

18 And they reference a CLW number which if
19 you compare matches Exhibit 44.

20 A. The first page of Exhibit 44 is.

21 Q. You look you see the CLW number in the
22 middle look where I'm pointing?

23 A. Oh, I see that yes.

24 Q. 6590?

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 A. Yeah yeah.

3 Q. And it's 6590. So they sent. They're
4 asking about this document okay?

5 A. Uh-huh.

6 Q. So it says we found out. They're asking
7 about Exhibit 44 which is in your report Exhibit I9
8 and they say.

9 We found documents showing the daily
10 pumping status for all Hadnot Point wells from
11 November 28, '84 to February 4, 1985 and they give
12 the CLW number of 6590 through 6593. Do any similar
13 documents exist that might help us gain a better
14 understanding of how wells were operated on a
15 day-to-day basis historically?

16 The answer is we need more information.
17 Where did the X's come from. If the information was
18 taken off of the sheets and transferred to the
19 CLW6590 where are the original sheets. The
20 information came off. We do not know of any other
21 documents that might exist.

22 Did I read that correctly?

23 A. You did.

24 Q. Okay. Do you know where the X's came

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 from?

3 MS. O'LEARY: Object to

4 foundation.

5 THE WITNESS: Somebody at the

6 base at the Water Treatment Plant generated this

7 document. I answered before. I don't know who and

8 I don't know exactly when.

9 BY MS. BAUGHMAN:

10 Q. Or well they say was it taken off the
11 sheets and it says where are the original sheets the
12 information came off?

13 Do you know the answer to that? Where
14 are the original sheets that this information came
15 from?

16 MS. O'LEARY: Object to

17 foundation.

18 BY MS. BAUGHMAN:

19 Q. Exhibit 44?

20 MS. O'LEARY: Object to

21 foundation.

22 THE WITNESS: I haven't seen any

23 sheets that and it appears that I'm not the only one

24 who haven't seen any.

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 BY MS. BAUGHMAN:

3 Q. Right. Okay. So ATSDR asked people at
4 the Water Treatment Plant where this Exhibit 44
5 information came from and they didn't know; right?

6 A. It appears to be.

7 Q. Yeah but this isn't information that you
8 had reviewed prior to signing off on your report in
9 December of 2024; right?

10 MS. O'LEARY: Object to form and
11 foundation.

12 THE WITNESS: I say I don't
13 recollect this. I don't know if I saw it in the
14 past or not. I don't recollect this.

15 BY MS. BAUGHMAN:

16 Q. This isn't cited in your report is it?

17 A. I would have to check but I don't think
18 so.

19 Q. Okay. What did you do to verify the
20 accuracy of the data in your Exhibit I9,
21 Exhibit -- which is Exhibit 44?

22 A. Well, since I couldn't find anything
23 else, and it was not generated by either ATSDR,
24 myself or other, you know, other people here, my

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 assumption was that's from the base personnel who
3 did that and put it in the archives and that I just
4 did it based on their knowledge and that's all I
5 could do.

6 Q. I'm going to object as nonresponsive.

7 Did you do anything to verify the
8 accuracy of the data that is on your Exhibit I9 and
9 your report and that we've marked as Exhibit 44?

10 MS. O'LEARY: Object to form.

11 THE WITNESS: Well, this is
12 basically a document an original document in the
13 files that has this information and I considered
14 that.

15 BY MS. BAUGHMAN:

16 Q. Did you do anything to verify the
17 accuracy of Exhibit 44?

18 MS. O'LEARY: Object to form.

19 THE WITNESS: I could not do more
20 than just take this document as being an original
21 document just like ATSDR did for many documents
22 including the data sheets or the laboratory reports
23 or the handwritten notes and all of that. I mean.

24 BY MS. BAUGHMAN:

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Q. So you assumed it was accurate. You
3 didn't do anything to verify?

4 MS. O'LEARY: Object to form.

5 THE WITNESS: I assumed that this
6 is information and that the only information that's
7 found on the frequency of use of the wells.

8 BY MS. BAUGHMAN:

9 Q. Okay. I'm handing you what I've marked
10 as Exhibit 47 to your deposition.

11 A. Thank you.

12 (Document marked for
13 identification as Exhibit 47.)

14 BY MS. BAUGHMAN:

15 Q. Exhibit 47 is stamped CLJA USMC GEN a
16 bunch of 0s, then 4794 through 4798 and it is a
17 handwritten document as well.

18 Have you reviewed this document before?

19 A. (Reviews document.)

20 It kind of sound familiar but I don't
21 know for sure.

22 Q. Okay. If you look at page 3 you see

23 that it says at the top "Wells that were on."

24 You see that? And it lists dates

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 January 28, 85, January 29, January 30, January 31st

3 all 1985 and then you go to the next page. February

4 1, 85, February 2, February 3, February 4th of 85 do

5 you see that?

6 A. I see that.

7 Q. Okay. So the date range of the wells

8 that were on is January 28, '85 to February 4, '85

9 similar to the time frame covered in Exhibit 44;

10 correct?

11 MS. O'LEARY: Object to

12 foundation.

13 BY MS. BAUGHMAN:

14 Q. At least it covers some of that time

15 frame?

16 A. It covers some of that time frame.

17 Q. It covers most of the time frame when

18 Holcomb Boulevard Water Treatment Plant was shut

19 down right?

20 A. According to the dates, yes.

21 Q. Okay. Did you compare as part of your

22 work in this case the information on Exhibit 47 to
23 Exhibit 44 to see if they match up?

24 A. I don't recall. That would be another

↑

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 source of information but I don't recall if I did
3 compare it or not.

4 Q. I mean, do you do you recall comparing
5 any other data to Exhibit 44 to see if Exhibit 44
6 was accurate?

7 A. Well, again I don't recall exactly what
8 I did there but I notice that on this, you know,
9 sometimes you have more than 20 wells operating,
10 sometimes you have less. That's what you're after.

11 Q. Okay. I'm going to object as
12 nonresponsive.

13 I'm asking you: When you wrote your
14 report in this case and I'm going back to Exhibit
15 44, did you compare it to any other data?

16 A. Well, I did not -- I do not recall
17 having considered this or seen this. I may have
18 seen it and in my report I relied on Exhibit 44.
19 That's that.

20 Q. Is there any basis to rely on Exhibit 44

21 as opposed to Exhibit 47?

22 A. Well, probably not. It's -- let's say
23 probably not. It's two different documents that
24 should be look and their differences it gives you an

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 appreciation of the uncertainty on the information.

3 And again it's all for short period of time.

4 Exhibit 44 was for a longer period of time and I

5 guess that's -- that's -- that allowed me to do some

6 percentage of well-being used better than this one

7 would have. Because this one is a much shorter

8 period of time.

9 Q. Sure. But if there are discrepancies
10 between Exhibit 44 and Exhibit 47 that would tell
11 you that there is some uncertainty or error
12 potential in Exhibit 44; correct?

13 A. Yes, yes. And I'm not sure but I
14 vaguely recollect that I may have looked for 651 if
15 it was different or not but again this is by memory.
16 I don't remember.

17 Q. Okay. Well you didn't write anything in
18 your report about?

19 A. No.

20 Q. Exhibit 44 did you?

21 A. I don't -- I didn't do. I didn't do
22 that, no.

23 Q. Okay. Would it surprise you that if
24 I -- if you went through the exercise of comparing

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 Exhibit 44 to Exhibit 47 that there are
3 discrepancies for every day from January 28 to
4 February 4 in terms of which wells were on and which
5 wells were off?

6 MS. O'LEARY: Object to
7 foundation.

8 BY MS. BAUGHMAN:

9 Q. At least one discrepancy per day?

10 MS. O'LEARY: Object to
11 foundation.

12 THE WITNESS: I wouldn't be
13 surprised if there are discrepancies but, you know,
14 you have information. I would compare the 651 and
15 those kind of things and. This is some things that
16 I vaguely remember having seen but I relied on the
17 Exhibit 44 because it was longer period of time.
18 That's went 69 days of information and I understand

19 that you have some and you have a lot of through the
20 records that things that are not always consistent.
21 So you just, you know, you just clearly say what and
22 state what you did and I did that in my report. I
23 did state exactly what I did. So you can read it.
24 BY MS. BAUGHMAN:

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 Q. Well you didn't report to the court that
3 there is uncertainty in the data, that you compared
4 it to other data and there were miss matches. You
5 didn't report that, did you?

6 MS. O'LEARY: Objection.

7 BY MS. BAUGHMAN:

8 Q. You did not include that in your report?

9 MS. O'LEARY: Object to form and
10 foundation.

11 THE WITNESS: Specifically on
12 this one I don't think I did that in my report.

13 BY MS. BAUGHMAN:

14 Q. Right. So you're saying you think you
15 were aware of Exhibit 47 you compared it you know
16 that there were discrepancies and you did not inform
17 the court of that?

18 MS. O'LEARY: Object to form and
19 foundation.

20 THE WITNESS: I didn't say that.

21 I say that this vaguely resembles
22 some things that I may have seen but I relied on
23 this one because it had the most longest period of
24 time because what I was interested in is what was

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 the frequency of use of well 651 and you don't get
3 that from this. You get that from that.

4 BY MS. BAUGHMAN:

5 Q. But if you compare the two and you see
6 that there are discrepancies that tells you that
7 there is an error rate in your data; right?

8 MS. O'LEARY: Object to form.
9 Already asked and answered.

10 THE WITNESS: I do not know there
11 are discrepancies on 651. I don't recall that.

12 BY MS. BAUGHMAN:

13 Q. Since Exhibit 44 does not indicate what
14 the source is of the data, there's no way it can be
15 verified; right?

16 MS. O'LEARY: Object to

17 foundation.

18 THE WITNESS: Please can you
19 repeat the question.

20 BY MS. BAUGHMAN:

21 Q. Since Exhibit 44 does not list the
22 source of the data for the X's on the document,
23 there's no way we can determine if it's accurate?

24 MS. O'LEARY: Object to form.

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 BY MS. BAUGHMAN:

3 Q. Or verify the accuracy?

4 MS. O'LEARY: Object to form and
5 foundation.

6 THE WITNESS: That specific of
7 the nature of the information available.

8 BY MS. BAUGHMAN:

9 Q. So HP 651 was put in service in July of
10 '72 right?

11 MS. O'LEARY: Object to
12 foundation.

13 THE WITNESS: That's my
14 recollection.

15 BY MS. BAUGHMAN:

16 Q. Yeah that's what it says in your report;
17 correct?
18 A. Show me where.
19 Q. Sure.
20 A. But that's my recollection.
21 Q. Yeah. I'm happy to show you where.
22 Let's see here.
23 A. (Reviews document.)
24 Q. Page 522. 522 at the bottom of the page

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 you have opinions for Hadnot Point.
3 A. Yes.
4 Q. Okay. And your first sentence under
5 Opinion 5 says.
6 Supply wells HP 651 only supplied water
7 to the Hadnot Point Water Treatment Plant from July
8 1972 until February 5, 1985.
9 Correct?
10 A. That's my understanding, yes.
11 Q. Okay. That's your understanding.
12 So if you add up the number of months
13 then that HP 651 was operating that would be it's 12
14 and a half years. So that would be 153 months does

15 that sound right?

16 A. I take your word for it.

17 Q. Okay. And what you've done is you've
18 used two months of data that is on your Exhibit I9
19 our Exhibit 44 and you've represented that that is a
20 surrogate for the other 151 months that 651 was
21 operating; right?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: That's the only

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 information that I found.

3 BY MS. BAUGHMAN:

4 Q. But I've accurately represented what you
5 did correct?

6 MS. O'LEARY: Object to
7 foundation.

8 THE WITNESS: That's what I did
9 and based on that information you get 39 percent
10 frequency of use for that particular well.

11 BY MS. BAUGHMAN:

12 Q. Right.

13 A. That's the only information for the

14 frequency of use for that wells that I could find.

15 Q. Okay. And just to be sure just to
16 restate it to make sure we're on the same page.

17 You took two months of data from the end
18 of November of '84 until the beginning of February
19 of '85. You calculated that HP 651 is operating 39
20 percent of the time ask and from that you've assumed
21 that it was always operating at 39 percent of the
22 time for the entirety of the 153 months that it was
23 in operation; correct?

24 MS. O'LEARY: Object to form and

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 foundation.

3 THE WITNESS: Yes, and it is
4 consistent with the fact that the wells were cycled
5 by by design and it is consistent.

6 BY MS. BAUGHMAN:

7 Q. So the wells were cycled by design on
8 and off; right?

9 A. Right.

10 Q. That was to avoid driving low quality
11 water into the water distribution system right?

12 A. Yes, that was by design.

13 Q. Okay.

14 A. And they were cycled on the other well
15 in more than 30 of them and they were recycling
16 them.

17 Q. So in terms of the cycling, was it
18 typical for the cycling to be consistent each month
19 or was the cycling such that in some months some
20 wells would be used more and in some months some
21 wells would be used less?

22 A. We only have data for basically two and
23 a half months or a little bit more than two months.
24 So, you know, you cannot I agree that you cannot

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 generalize but that's the only information we have.

3 Q. Did you ask?

4 A. We know that it was not 100 percent and
5 we know that it was not zero percent. So you have
6 some information that's propose 39 percent. So what
7 else can I use.

8 Q. Okay. Did you talk to anyone at the
9 Water Treatment Plant about what the normal
10 operation was in terms of cycling of the wells at
11 Hadnot Point?

12 A. I did and they said they cycle them and
13 the thing is historically I don't know exactly how
14 they did it but right now everything is automated.
15 So they can stop them, you know, not manually but at
16 the time they were just starting the wells manually.

17 Q. Okay.

18 A. Just go and prepare them and it's on and
19 then next week somebody tells you shut down this one
20 open that one for some reasons and and that's a way
21 it was done.

22 Q. Isn't it true that the ATSDR had data on
23 the cycling of the wells for a period of 10 years
24 from 1998 to 2008?

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT

2 MS. O'LEARY: Object to
3 foundation.

4 THE WITNESS: Yes, but I use that
5 as completely not representative from what happened
6 before the problems was discovered.

7 BY MS. BAUGHMAN:

8 Q. And what for what reason?

9 A. Just just because it was a different
10 setting, different setting after, you know, for that

11 period of time for which you know which wells were
12 on and off. And and that includes the well for
13 which they have data. Includes none of the ones
14 that were contaminated and the only information that
15 is -- that is available for that frequency of use is
16 what I just mentioned. It's -- it's Exhibit 44.

17 Q. Well did you have available to you the
18 10 years of of pumping data from 1998 to 2008?

19 A. Yes, but in my opinion that, you know,
20 extrapolating that all the way to 1950 is is just
21 kind of -- it's one way to do it but that doesn't
22 mean it's right at all.

23 Q. Did you compare your methodology from
24 Exhibit 44 to the 10 years of data from 1998 to 2008

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1 UNCERTIFIED/UNEDITED/UNPROOFREAD ROUGH DRAFT
2 to see whether your methodology was valid?

3 MS. O'LEARY: Object to form and
4 foundation.

5 THE WITNESS: At least the data I
6 considered is within the period that contamination
7 was there.

8 BY MS. BAUGHMAN:

9 Q. Object as nonresponsive.

10 As a check on your methodology did you
11 compare the data that you had in Exhibit 44 to the
12 109 years of data from '98 to 2008?

13 MS. O'LEARY: Object to form and
14 foundation.

15 THE WITNESS: I didn't do that
16 because I don't think it's representative to make
17 such a comparison.

18 BY MS. BAUGHMAN:

19 Q. There are some wells that were operating
20 during the time frame of Exhibit 44 that were also
21 operating from '98 to 2008; right?

22 A. Yes.

23 Q. So you could look at that to see whether
24 how often were those wells used in Exhibit 44, how

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2 often were they used in '98 to 2008 to see whether
3 it matched up?

4 A. I didn't do that.

5 Q. You did not?

6 A. I did not.

7 Q. Okay. Do you know whether the data from
8 '98 to 2008 indicates that the cycling occurred more

9 in the period of months as opposed to days? In
10 other words, certain some wells weren't used for a
11 given month and then they were used more in the next
12 month or was it more in cycling of a daily
13 operation?

14 MS. O'LEARY: Object to form.

15 BY MS. BAUGHMAN:

16 Q. Did you look at that to see?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: My understanding is
19 I did not consider that because my understanding of
20 it is everything changed.

21 BY MS. BAUGHMAN:

22 Q. Why did everything change?

23 A. Because they just modernize and they
24 just basically learn much more about the system

↑

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2 after the problems were discovered and they
3 modernize and they had new wells and they had all
4 kind of new information and said do not operate like
5 they did in 1950.

6 Q. Okay.

7 A. That's my understanding.

8 Q. And who did you rely on for that
9 information?

10 A. Well, for -- well several things but one
11 thing I recall I just when I was talking to the
12 people at the Water Treatment Plant I just said, you
13 know, things have changed and they say oh,
14 everything is much modern now. We have scatter
15 system. We have this we have that and they've
16 learned a lot and they've modernized and that's
17 expected.

18 Q. That conversation occurred in when?
19 2025?

20 A. Probably before in some of my visits.
21 That would have been during my visits.

22 Q. So when was the conversation about the
23 modernization that you just talked about? When did
24 you have that conversation?

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2 A. It was it was previous visit because
3 that was the first time that they were just showing
4 me the way the scatter system and so on and it was
5 not the last visit. It was before.

6 Q. For this case or for another case?

7 A. I do not recollect that.

8 Q. Okay. Who did you speak to?

9 A. The people at the Water Treatment Plant.

10 Q. The name. I want the name.

11 A. I did not ask name because

12 everybody -- that was basically the rule of the game

13 is you can talk to people but you don't ask name and

14 take notes of names.

15 Q. Okay. When did the person who told you

16 this information about modernization when what was

17 the years that that person worked at the Water

18 Treatment Plant?

19 A. Probably quite recent because nobody

20 there was there in the '80s that I understand.

21 Q. Were they there from of '98 to 2008?

22 A. Possibly.

23 Q. Did you ask?

24 A. I didn't -- I don't recall.

↑

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2 Q. Okay. Is it your opinion that December

3 1984 represents a typical month for the Hadnot Point

4 water distribution system in terms of the from the

5 1950s up until 1983?

6 MS. O'LEARY: Object to form.

7 THE WITNESS: Can you repeat
8 please.

9 BY MS. BAUGHMAN:

10 Q. A yeah. Does December 1984 represent a
11 typical month for the Hadnot Point water treatment
12 plants operation and well cycling as compared to the
13 three decades prior?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: In 1984 there was
16 the problem was being investigated. The problem was
17 there and there were wells that were shut down.
18 They were trying to understand what was going on.
19 So it is what it is and we have the information we
20 have for that period of time and, you know, what
21 what we know for the from the 1950s to the present
22 is is not that well-documented as far as exactly
23 what they were doing. But the big picture is
24 documented. There were cycling wells and when the

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2 wells would just produce less they would just stop
3 them and maintain them and so on and and that's the
4 type of an operations that -- excuse me -- that is

5 consistent with with what you do when you have a
6 field of producing wells.

7 BY MS. BAUGHMAN:

8 Q. Okay. I'm going to object as
9 nonresponsive.

10 December 1984 was not a typical month
11 for Hadnot Point Water Treatment Plant operation
12 because they were investigating the contamination at
13 that time right?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: In that sense it
16 was, but they still had to produce water to supply
17 water.

18 BY MS. BAUGHMAN:

19 Q. Okay. And you'd agree with me that new
20 wells that 7 new wells, 611, 614, 621, 627 and 639.
21 Those are all new wells that had come online less
22 than 7 months prior to December of '84 right?

23 MS. O'LEARY: Object to
24 foundation.

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2 THE WITNESS: I would have to
3 double-check that. I don't recall them the name of

4 the wells.

5 BY MS. BAUGHMAN:

6 Q. Okay. Would it surprise you that those
7 7 new wells, 611, 614, 621, 627 and 639, had the
8 capacity to supply half of the water needed for the
9 Hadnot Point Water Treatment Plant?

10 MS. O'LEARY: Object to
11 foundation.

12 THE WITNESS: Again I will have
13 to check and capacity doesn't mean what they can
14 produce.

15 BY MS. BAUGHMAN:

16 Q. Right.

17 A. It's the capacity.

18 Q. Did you evaluate did you perform the
19 exercise of looking at Exhibit 44, your Exhibit I9
20 in your report, to see how often the those 7 new
21 wells were used in that two-month time frame?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: I did not evaluate

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2 that and and if the capacity was higher maybe they

3 were the schedule of cycling was different.

4 BY MS. BAUGHMAN:

5 Q. As compared to in the years prior when?

6 A. Yes.

7 Q. Those wells weren't there right?

8 A. Yeah.

9 Q. Okay. Okay. I'm going to ask I want to
10 ask you about a different subject matter.

11 If you could turn to your opinion number
12 11 I'll try to -- that is -- hold on.

13 So your opinion number 11 on page 537.
14 You're critical there of ATSDR for not including
15 available site-specific data. Right?

16 In fact if you turn to 538 in your in
17 summary part of 538 you say you reference parameters
18 that are inconsistent with site-specific data.

19 Is there any site-specific data that you
20 claim ATSDR did not consider other than the FOC or
21 fraction of organic carbon data?

22 A. Well, that's the one that really
23 matters. In addition to the errors I did for the
24 Tarawa Terrace model but that's the one that is

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2 important for for evaluating the timing of transport
3 of the contaminants.

4 Q. Okay. FOC is part of calculating the
5 retardation factor right?

6 A. It's part of.

7 Q. Okay.

8 A. Of that calculation.

9 Q. All right. But just before we talk
10 about FOC I just want to know.

11 Is there any other site-specific data
12 that you claim ATSDR -- that was available to ATSDR
13 but ATSDR did not consider in the modeling?

14 Is there anything else other than the
15 FOC data?

16 A. Well, you know, bulk density is not
17 representative of the site. So that's another one.
18 And and.

19 Q. I'm sorry. Was there -- wait, wait.

20 Was there bulk density data or are you
21 talking about a factor? I'm talking about
22 site-specific data.

23 MS. O'LEARY: Object to form.

24 THE WITNESS: Yeah. No, that will

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2 not be site-specific data.

3 BY MS. BAUGHMAN:

4 Q. Okay.

5 A. It's just errors I did.

6 Q. Okay. So I'm not talking about errors

7 here. So let me try to rephrase it and see we're on

8 the same page.

9 I'm talking about site-specific data

10 that you claim existed but ATSDR didn't use for the

11 modeling.

12 You've identified the FOC data.

13 Is there any other site-specific data

14 that you claim ATSDR did not use?

15 A. That as far as geochemistry is concerned

16 that's the one that's the one I flagged and I don't

17 have another one.

18 Q. You don't. Okay.

19 So I want to talk about the FOC data.

20 You -- if we look at page 517 of your

21 report, you list the site-specific FOC data there;

22 correct?

23 A. Let me see. 517? Yes.

24 Q. Okay. First question I have for you is:

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2 These data vary very widely right by a factor of at
3 least 3 orders of magnitude?

4 A. This type of data does that, yes.

5 Q. Okay. So 3 orders of magnitude means
6 like by a factor of at least a thousand?

7 A. Yeah, in some areas you have more
8 fraction organic carbon than some other areas yes.

9 Q. Okay.

10 MS. O'LEARY: I'm sorry. Object
11 to foundation on the last question.

12 BY MS. BAUGHMAN:

13 Q. Which of the data that are listed on
14 your Exhibit 3-2 on page 517 of your report, which
15 of those samples are from Tarawa Terrace as opposed
16 to Hadnot Point?

17 A. Well, all of the samples I believe are
18 in the Hadnot Point area but as far as the
19 hydrogeology are concerned we are talking about the
20 same type of materials beneath both. You don't have
21 a stop just because you are changing addresses.

22 Q. Okay. Just to be clear, all of the FOC
23 data that existed that you say ATSDR should have
24 used, all of them is from Hadnot Point none of it is

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2 from Tarawa Terrace; right?

3 MS. O'LEARY: Object to form.

4 Asked and answered.

5 THE WITNESS: I believe so

6 because that's that's why it was measured, and it is

7 measured in the materials for which groundwater

8 moves.

9 BY MS. BAUGHMAN:

10 Q. Do you have any?

11 A. For both for both Tarawa Terrace and

12 Hadnot Point areas.

13 Q. Okay. Do you have any FOC data from

14 Tarawa Terrace such that you can say that the

15 numbers are the same in Tarawa Terrace and Hadnot

16 Point?

17 A. It's geological materials are the same.

18 Therefore there is we have the data we have and it

19 will be in the same range. As a geologist I can

20 tell you that.

21 Q. Do you agree that fraction of organic

22 carbon should not be used to estimate Kd if the

23 organic carbon content is less than .001?

24 A. Well, this is kind of -- it is when the

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2 relationship starts to to not be that good anymore.

3 But it is in every in every type of groundwater like

4 this you will have a wide range and typically what

5 is being done is because the groundwater is going

6 those materials you typically take median value or

7 geometric mean value or average value to represent

8 those materials and in some sense that's what that's

9 what, you know, even ATSDR had to do.

10 Q. You're aware that the EPA and that other

11 authors have published that you should not use

12 fraction of organic carbon to estimate Kd if the

13 organic carbon content is less than .001 right?

14 MS. O'LEARY: Object to

15 foundation.

16 THE WITNESS: It is not stated

17 exactly like that.

18 It is when the relationship falls

19 starts not to be a linear relationship in some sense

20 and it is recommended that, you know, if you -- if

21 you start to go really low like that, it's -- it's

22 not -- it becomes highly uncertain.

23 BY MS. BAUGHMAN:

24 Q. Okay. So and you're going back to your

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2 opinion 11, you say at the top of page 538 that.

3 ATSDR's use of a low Kd value had the
4 effect of accelerating arrival of contaminants at
5 the supply wells.

6 Okay. So my question is: Have you
7 conducted a sensitivity analysis for your opinion
8 that the retardation factor used by ATSDR had the
9 effect of accelerating the arrival time?

10 MS. O'LEARY: Object to form and
11 foundation.

12 THE WITNESS: Well, essentially
13 what we are doing is the Tarawa Terrace model
14 because that didn't make the same mistakes or
15 assumptions and incorrect assumptions in the in the
16 Hadnot Point ones. They were more reasonable there.

17 BY MS. BAUGHMAN:

18 Q. Okay. I'm just asking: Did you conduct
19 a sensitivity analysis to see what the effect would
20 be about using a different retardation factor?

21 A. Well.

22 MS. O'LEARY: Object to form and
23 foundation.

24 THE WITNESS: The sensitivity

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2 analysis that if you if you have higher values for
3 the retardation factor, it will go slower and if you
4 have lower values for the retardation factor, it
5 will go faster.

6 BY MS. BAUGHMAN:

7 Q. I'll object as nonresponsive.
8 Did you run the model with different
9 retardation factors to see what the effect would be?

10 A. I did -- I didn't -- I did a calculation
11 I present in my report which are basically the
12 simplest type of calculations that follow the the
13 laws of hydrogeology if you wish to estimate
14 transport and this is the results are basically
15 reasonable and that gives you a ballpark.

16 Q. Okay.

17 A. I mean, I'm not saying that it
18 is -- that it is the total or something else. It's
19 something that tells you this is the way it looks
20 like.

21 Q. Objection?

22 A. And then and then you can go into
23 complexity to hide the fact that you don't have
24 information but what you should never do is ignore

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2 the site-specific data. That's basically my point.

3 Q. Objection. Nonresponsive.

4 Okay. I'm at?

5 THE VIDEOGRAPHER: Time.

6 BY MS. BAUGHMAN:

7 Q. I know did you go to the ATSDR model not
8 your calculations but the ATSDR model, change the
9 retardation factor using the different FOC numbers
10 for Tarawa Terrace to see what effect that would
11 have? Did you do that?

12 A. I believe Dr. Spiliotopoulos did that.

13 Q. Okay.

14 A. I don't -- I didn't do that on the
15 model. I just.

16 Q. All right.

17 A. Looked at -- looked at the calculation
18 based on the evaluation the data and the parameters
19 that are reasonable to make my estimate presented in

20 my report.

21 Q. Let's talk about that. Let's go to -- I
22 want to talk about your travel time calculation for
23 Tarawa Terrace on page 515 and 516 of your report.

24 And you calculated travel times for PCE

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2 to reach TT-26?

3 A. Hold on. Hold on.

4 Q. You're going to know this without
5 looking.

6 You calculated travel times for PCE to
7 reach Tarawa Terrace 26 from ABC One-Hour Cleaners
8 from three representative flow paths right?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: Yes.

11 BY MS. BAUGHMAN:

12 Q. Okay. Did you select a flow path that
13 was meant to be representative of a path line that
14 leads to the first detection or first arrival of PCE
15 at TT-26?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: I just looked at
18 the representative pathways for the situation with

19 all of the simplification and uncertainty that are
20 included in in this. I use the ATSDR hydrological
21 environment which is oversimplified to start off
22 with. So all of this -- all of this tells you that
23 if you do it in a simple manner which it should be
24 done first, you just get the range and that is the

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2 range. The fastest pathways that I made a
3 calculation for is if the contamination travels in
4 layer 1 for most of the distance to the well.
5 Remember that the well opening is
6 in layer 3. So which ever way you go at some point
7 you have to go down there. And the pathways that I
8 have are representative. It's a ballpark.

9 BY MS. BAUGHMAN:

10 Q. Okay. I I'm going to object as
11 nonresponsive.

12 Would you agree that your analysis
13 regarding Tarawa Terrace and the travel time is not
14 meant to determine when PCE would first arrive at
15 TT-26? You did not do that calculation, did you?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: No, the calculation

18 is when when basically the contamination arrives and
19 you can have molecule arrive faster than what I
20 calculated but what I am looking at is when does a
21 substantial amount of contamination would have
22 arrived at the well making a simple, a simple set of
23 calculations that can be reproduced that do not have
24 errors or incorrect statement in and that's what I

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2 did and that gives you a ballpark.

3 BY MS. BAUGHMAN:

4 Q. Okay. Have you reached an opinion or
5 have you reached a conclusion within reasonable
6 scientific certainty as to when TT-26 was first
7 contaminated with PCE?

8 MS. O'LEARY: Object to form.

9 THE WITNESS: I did what I did
10 and it's expressed in my report.

11 BY MS. BAUGHMAN:

12 Q. You're aware that there is -- there are
13 textbooks and peer-reviewed literature about how to
14 calculate the break through when contamination first
15 arrives at a well right you're familiar with that?

16 A. Yes.

17 MS. O'LEARY: Object to

18 foundation.

19 BY MS. BAUGHMAN:

20 Q. That's not what you did?

21 MS. O'LEARY: Sorry please slow

22 down. Object to foundation.

23 BY MS. BAUGHMAN:

24 Q. You did not do a break through analysis

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2 did you?

3 MS. O'LEARY: Object to form and

4 foundation.

5 THE WITNESS: I did a travel time

6 analysis along three representative pathways.

7 That's what I did.

8 BY MS. BAUGHMAN:

9 Q. You did not do a break through analysis

10 to determine when contamination would first occur at

11 TT-26 correct?

12 MS. O'LEARY: Object to form and

13 foundation.

14 THE WITNESS: As I said before

15 you can have a molecule arriving faster but it is

16 not what I did. I said the typical travel time with
17 all the uncertainty you have and I recognize that is
18 basically the ballpark is as I estimated it in my
19 report and you have aspects of it that some of it
20 can go faster but you also have some of it can go
21 slower.

22 BY MS. BAUGHMAN:

23 Q. Right. But?

24 A. And you have that.

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2 Q. You agree with me you understand the
3 concept of break through?

4 A. Yeah.

5 Q. Right and you agree with me that's
6 documented in textbooks that you would consider to
7 be reliable on groundwater flow and transport right?

8 MS. O'LEARY: Object to
9 foundation.

10 THE WITNESS: Yes, you do.

11 BY MS. BAUGHMAN:

12 Q. And there's a methodology to use to
13 determine the break through of a contaminant at a
14 well correct?

15 MS. O'LEARY: Object to

16 foundation.

17 THE WITNESS: Yes, but we are
18 talking about something different here. I'm saying
19 when when would you have expected contamination, you
20 know, substantial contamination to arrive at the
21 well.

22 BY MS. BAUGHMAN:

23 Q. Okay.

24 A. I'm not talking about molecular.

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2 Q. You didn't do the break through analysis
3 right?

4 A. I.

5 MS. O'LEARY: Object to form and
6 foundation.

7 THE WITNESS: Sorry.

8 I did not do a break through
9 analysis.

10 BY MS. BAUGHMAN:

11 Q. Okay. And what do you define as
12 substantial contamination at TT-26 what does that
13 mean?

14 A. It's when.

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: Yeah.

18 It is when going from some of the
19 pathways the contamination is expected to arrive
20 basically in a substantial manner.

21 BY MS. BAUGHMAN:

22 Q. Is there a number for substantial like
23 like a certain microgram per liter that defines
24 substantial contamination for you?

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2 A. I did not try to evaluate
3 concentrationings. I evaluate time because I think
4 that's more important.

5 Q. Okay. But you said you were calculating
6 the time for substantial contamination what do you
7 define as substantial contamination?

8 A. Something that.

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: Sorry.

12 Something that would be measurable

13 at the time and I don't have a number. I did not do
14 a breakthrough concentration arrival at the well. I
15 just made how much time would it take for the
16 concentration of the PCE on average along those
17 three different type of pathways to arrive at the
18 well and that's what that's a simple things that I
19 did. And this is a reasonable first step that
20 should always be done to give you a ballpark of what
21 is reasonable. And.

22 BY MS. BAUGHMAN:

23 Q. I'm going to object to the nonresponsive
24 portion and I will pass the witness.

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2 MS. O'LEARY: Okay. If we can
3 just take a few minutes break. Thank you.

4 THE VIDEOGRAPHER:

5 MS. BAUGHMAN: I assume you won't
6 be talking to your witness during the break.

7 MS. O'LEARY: I might be asking
8 him about certain things but that's appropriate.

9 MS. BAUGHMAN: That's not
10 appropriate.

11 MS. O'LEARY: We can fight about

12 that later.

13 THE VIDEOGRAPHER: Time is 1:50

14 PM. We are now off the record.

15 (A recess was taken.)

16 THE VIDEOGRAPHER: The time is

17 1:57 PM. We are now on the record.

18 MS. O'LEARY: Thank you.

19 BY MS. O'LEARY:

20 Q. And Dr. Hennet I have just a very few
21 questions.

22 Near the end of Ms. Baughman's questions
23 she had several for you about the flow paths you
24 used to calculate travel time of PCE to well TT-26.

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2 Do you recall that?

3 I have some -- I want to ask you about a
4 few things in your report related to that.

5 So if you could go to your report which
6 is Exhibit 31 on page 5-15.

7 A. Yes.

8 Q. All right. In the last paragraph the
9 second sentence it says.

10 The representative flow paths considered

11 to represent PCE transport in groundwater are
12 illustrated in Exhibit 3-1. The site-specific data
13 for FOC is summarized in Exhibit 3-2. Supporting
14 materials for the calculated travel times are
15 provided in Attachment D.

16 Did I read that correctly?

17 A. Yes.

18 Q. And so if I -- if you could turn to
19 Attachment D from your report to page D-7 and to
20 D-8.

21 A. Yes.

22 Q. Are you there?

23 Are the graphs shown on D-7 and D-8 part
24 of the supporting materials to your opinion on the

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2 arrival time of PCE at TT-26?

3 MS. BAUGHMAN: Objection.

4 Leading. Form.

5 THE WITNESS: Yes, this is -- this
6 is basically what I relied upon to to support my
7 calculation.

8 BY MS. O'LEARY:

9 Q. And how do these the figures shown on

10 D-7 and D-8 relate to your representative flow
11 paths?

12 A. This is what this provides you is
13 basically on the different layers the Gradient of
14 groundwater flow.

15 Q. Oh. Are you looking at D-5 and D-6 or
16 D-7 and D-8?

17 A. Well, okay. That is on both what I just
18 said. But can you repeat the question because I
19 think I missed the first question you asked.

20 Q. Yeah. So the figures shown -- well
21 let's back up.

22 The figures shown on D-7 and D-8 that
23 are labeled figure F21 and figure F25, F20 and F24.

24 Do you see those figure labels?

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2 A. Yes.

3 Q. Where did like where do these figures
4 come from?

5 A. They come from the ATSDR work.

6 Q. Okay. And the there's what looks to me
7 like a plume shown on these figures; is that
8 correct?

9 A. Yes.

10 Q. Okay. And why did you include figures

11 showing the plume in Attachment D?

12 A. That's to show where ATSDR estimated the

13 concentration was in the groundwater environment in

14 the in the different layers. I mean, in layer 1

15 4-47 and in layer 3-48.

16 Q. And why did you include these figures

17 showing ATSDR's prediction of the plume in your

18 report?

19 A. Well, it's it's because ATSDR

20 calculation and estimate shows that the

21 concentration or the contaminant, the contaminant,

22 the COCs are basically traveling into those layers

23 and they depicted the results here as plumes.

24 Q. Okay.

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2 A. And that and that shows you that you

3 have transport in layer 1 and you have transport in

4 layer 3.

5 MS. O'LEARY: Okay. I don't have

6 any other questions. Thank you.

7 MS. BAUGHMAN: Great. Hold on one

8 second. Let me just double-check.

9 Yeah, we're done.

10 THE VIDEOGRAPHER: This concludes

11 for today's deposition. The date is June 4, 2025.

12 The time is 2:02 PM. We are now off the record.

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